

# amateur TAPE RECORDING

INCORPORATING PRACTICAL TAPE RECORDING AND THE RECORDIST

Vol. I, No. II

JUNE, 1960

Price 1s. 6d.



For full details of the "Walter" range of Tape Recorders write to—  **Walter** INSTRUMENTS LTD.  
MORDEN . SURREY . Phone: DERwent 4421-5



Only with **FI-CORD** can you have it both ways—really HI-FI and really portable

Don't be misled by the compact size. The **FI-CORD** is a high fidelity instrument of advanced scientific design—assuring true-to-life recordings.

Frequency 50-12,000 c.p.s.  $\pm$  3db. Tape speeds  $7\frac{1}{2}$  i.p.s. and  $1\frac{1}{2}$  i.p.s. Twin track record/playback, using standard  $3\frac{1}{4}$ " spools.

Wherever you go, you can take your **FI-CORD** with you, it is ideal for adding

the realism of sound to movie films.

The **FI-CORD** weighs only  $4\frac{1}{2}$  lbs., measures  $9\frac{1}{2}$ " x 5" x  $2\frac{1}{4}$ ", operates in any position (lid open or shut) and requires no power point. It runs on 4 batteries, rechargeable from the automatic charger supplied.

Built-in speaker. Full playback volume. Extension speaker socket. Dynamic microphone with stop/start switch.

**CATCH IT—  
AND KEEP IT—WITH**

Write for name and address of your nearest stockist to:—

**FI-CORD** Ltd • 40a Dover St • London • W1

Tel: HYDE PARK 3448

**FI-CORD**

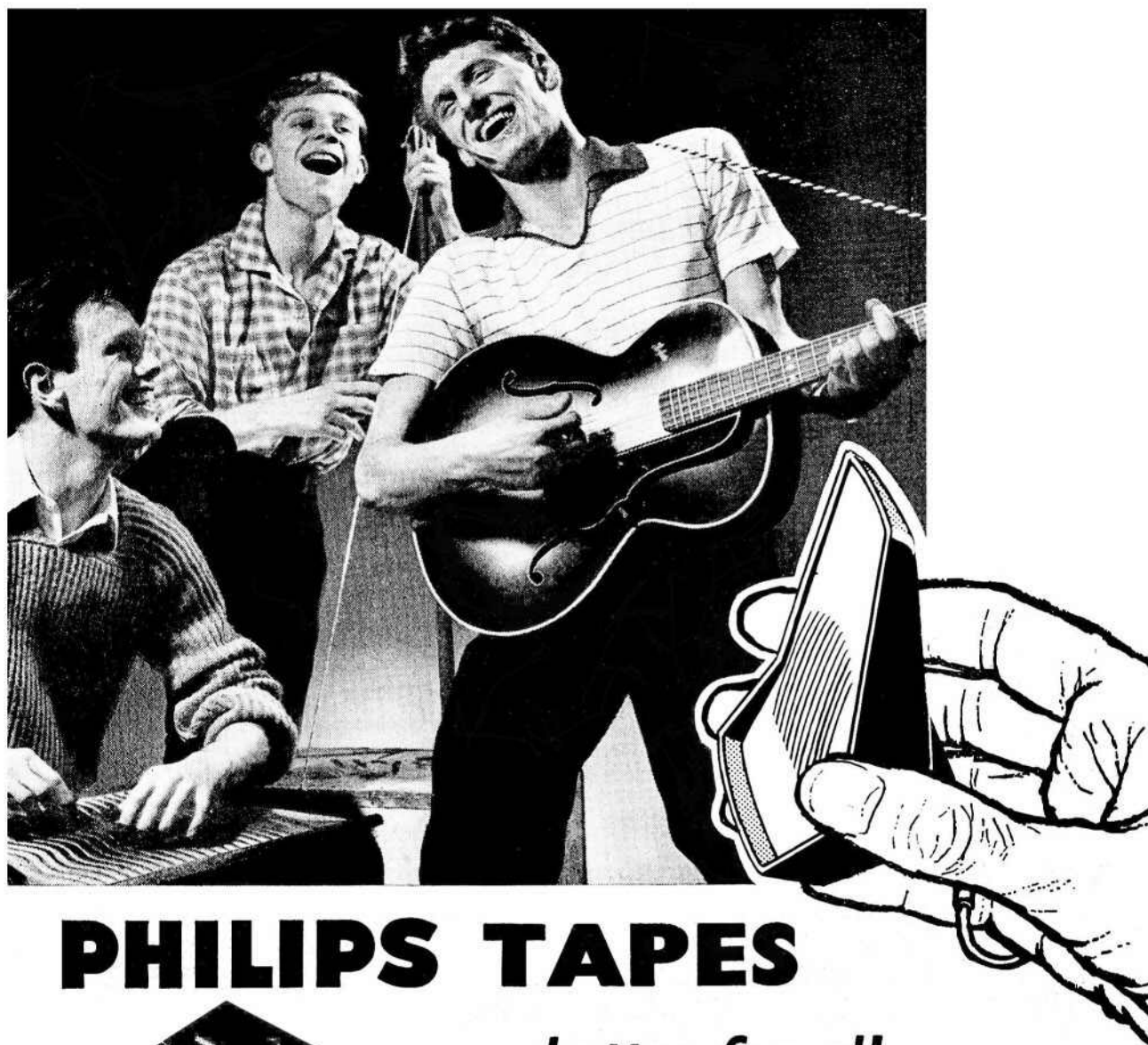
Complete with  
Microphone, Tape,  
Batteries and Charger

**59** GNS

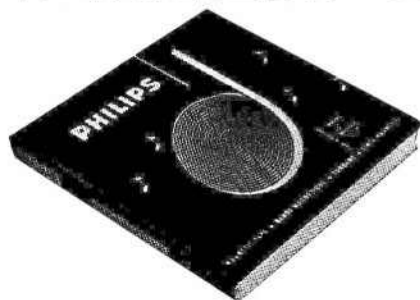
or with Grampian DP4/M  
Microphone

**66** GNS





# PHILIPS TAPES



- Strong pvc base.
- Resistant to stretch, snapping and tearing.
- Powerful adhesion of magnetic coating.
- Unvarying high-quality performance.
- Standard, long-play, and double-play tapes available.

**...better for all tape recorders!**

On any tape recorder, Philips Tape gives you better results. It has great sensitivity, a very wide frequency range, and extremely low noise level. This superlative tape is equally good for music or voice recording. Available in all reel sizes from 3", 5", 5 $\frac{3}{4}$ " and 7". For those building up a tape library, Philips 5", 5 $\frac{3}{4}$ " and 7" reels are specially packed in durable books designed for convenient storage, and quick easy reference.

PHILIPS ELECTRICAL LIMITED • CENTURY HOUSE • SHAFTESBURY AVENUE • LONDON • WC2



# THE British Recording Club

Secretary: A. Alexander

Chairman: E. Yates

## DEPARTMENTS

Hospital Services: A. Lovell

Braille Transcription Service: J. F. Adams

Religious Programmes: R. Mayor

Educational Division: Dr. Smith

Joint Programmes Organiser: F. Willemson

## MEMBERSHIP FORM

<p style="text-align: center;"><b>FULL MEMBERSHIP</b> <b>21/- PER ANNUM</b></p> <p><b>To: THE SECRETARY,</b> <b>THE BRITISH RECORDING CLUB,</b> <b>145 FLEET STREET,</b> <b>LONDON, E.C.4.</b></p> <p>Dear Sir, I wish to become a member of The British Recording Club. I enclose my membership fee of one guinea (21/-), which includes my annual subscription to the "Amateur Tape Recording" magazine.</p> <p>Name .....</p> <p>Address .....</p> <p>.....</p> <p>Date.....</p> <p>Type of Recorder used.....</p>	<p style="text-align: center;"><b>ASSOCIATE MEMBERSHIP</b> <b>5/- PER ANNUM</b></p> <p><b>To: THE SECRETARY,</b> <b>THE BRITISH RECORDING CLUB,</b> <b>145 FLEET STREET,</b> <b>LONDON, E.C.4.</b></p> <p>Dear Sir, I wish to become an associate member of The British Recording Club. I enclose my annual subscription fee of five shillings (5/-).</p> <p>Name .....</p> <p>Address .....</p> <p>.....</p> <p>Date.....</p> <p>Type of Recorder used.....</p> <p><small>Associate Members DO NOT receive "Amateur Tape Recording" magazine, but are entitled to participate in the Club's Tapesponding activities and any other services which become available.</small></p>
---	---

## MEMBERS WISHING TO "TAPESPOND" ARE REQUESTED TO COMPLETE THE FORM BELOW

*I would like to Tapespond and agree to my name and address being published.*

Name..... Age if under 21.....

Address .....

BLOCK LETTERS PLEASE

Interests..... Club Number.....

Taste in Music.....

Type of Machine Used..... Size of Spool.....

Tape speed(s)..... Occupation.....

With what part of the world do you wish to Tapespond?.....

### THE AIMS OF THE BRITISH RECORDING CLUB

- (1) To act as a central organisation for enthusiasts wishing to Tapespond throughout the world.
- (2) To assist in every way possible the advancement and enjoyment of Tape Recording and its many facets.
- (3) To act as a liaison link between Manufacturers, Dealers and enthusiasts.
- (4) To advise and answer member's queries.
- (5) To keep readers abreast of the times with new ideas and equipment in the fields of Tape Recording, Hi-Fi, Stereo and Recordings.

AMATEUR TAPE RECORDING



# amateur TAPE RECORDING

Incorporating Practical Tape Recording and The Recordist

THE OFFICIAL MAGAZINE OF THE BRITISH RECORDING CLUB (INCORPORATING THE BRITISH TAPE RECORDING SOCIETY.)

Club, Editorial and Advertisement Offices:  
145 Fleet Street, London, E.C.4

**Telephones:**

Club and Editorial: Ludgate Circus 7918

Advertisement: Fleet Street 7732/2110

**Editor**

ROBINSON P. RIGG, M.B.K.S.

**Deputy Editor**

K. W. PETERS

**Technical Editor**

F. C. JUDD, A.Inst.E.

**Technical Adviser**

F. WINSTON REYNOLDS,  
A.M.Brit.I.R.E., M.I.W.M., Inst.P.

**Club News Editor**

T. NURSE

**Advertisement Manager**

J. A. PEARCE

**Assistant Advertisement Manager**

J. E. HUNTER

## CONTENTS

Round the World of Tape	4
Audio Fair	6
Tape-View Afloat	20
It Won't be a Stylish Carriage	23
National Tape Recording Course	26
Club Pictorial	28
Tape Club News	29
Inter-Tape Directory	33
"Dear Sir..."	41
Clubman Profile	45
Factory Visit—Leavers-Rich	46
Tete-A-Tape	51
What Is?	55
The Healing Voice	61
Tape and Disc Review	63
Hannover Fair, 1960	66
Meet the Dealers	68
Home-View Magnafon, TR 60	71

The title *Amateur Tape Recording* is registered at Stationers' Hall, London. The contents are copyright and may only be reproduced by permission of the Proprietors. Signed articles represent the views of the authors and are not necessarily those of the editor.

JUNE, 1960

## IF IT'S AUDIBLE—IT'S RECORDABLE

It all started one Friday in April with a feature in the London 'Star' about a mysterious, persistent, low-pitched hum in Kent.

Edward Hyams, a novelist who lives in Kent reported that the hum — persistent, alternating and low pitched was first noticed by his wife. At first he could not hear it, later he could, and did, until it drove him to distraction. He complained to the Post Office — it might have been the overhead high voltage cables. The matter was investigated, with no result. Questions were asked in the House — the Government knows nothing about the hum.

Within a few days of the report in the paper, letters were received from all over the country from other people who are troubled by mysterious hums. The B.B.C. presented a report on it in the 'To-night' television programme and more people wrote in. For example in Lancashire, Walton-le-Dale Council commissioned their public health officer to hire a tape recorder to record and trace a hum which was disturbing the peace of ratepayers. The recording was played back to experts and it was analysed as a dynamo noise — the dynamo in the local gas works in fact.

Now, it seems reasonably certain that in parts of Britain people are being disturbed by hums which keep them awake at night, which 'get on their nerves' and which sometimes affect their health. Something ought to be done about it, but noise is a transient thing and its effect on people varies, so it is sometimes hard to pinpoint and identify it.

If it is audible to the human ear, it can be recorded on tape — and this is where the British Recording Club can help.

If our thousands of members and readers were prepared to make themselves and their recorders available every time a hum or other noise became a public nuisance, to record the sound for analysis and detection, the Authorities would be provided with undeniable evidence, and they would have the opportunity to do something about it.

There seem to be a number of hums at work in Britain. Let's put them on tape this summer — if they exist only in people's imagination they can't be recorded; if they really do exist, let's record them. Already members in Kent are after Mr. Hyams' hum; led by our Technical Editor, sound recording equipment is ready to be rushed to the spot as soon as it is heard. It won't be long before we know what the hum really sounds like, and the evidence of our tapes can be presented to the proper authorities.

'Hum Hunting' requires a little know-how however and it is easy to follow a false 'scent'. If you do want to join in, first write to the Club Secretary for a list of hints and tips which our technicians have drawn up. Then contact your local newspaper, police station and council office and tell them that you are willing to help by recording any hum reported to them. If you yourself are troubled by a hum — put it on tape straight away.

Once recorded — send the tape to us and we will analyse it and return it to you with a report. From then on it is up to the Authorities to do something about it.

*Amateur Tape Recording Magazine* has endeavoured to ensure that all advertisements comply with the revised hire purchase regulations, but regrets that it cannot be held responsible for any advertisement which fails to comply with them.

**You can Rent this New  
Portable Tape Recorder  
including a complete  
Language Course on Tape  
by the  
Month!**



**Retail Price £31.10.0.**

Yes! you can hire this brand new portable Tape Recorder together with a comprehensive Language Course on tape in English, French, Italian, German, Spanish or Russian for £6.0.0d per month or £10.0.0d for 2 months. And if after one or two months you would like to purchase the recorder and language course, 50% of the amount paid for rental would be deducted from the purchase price. Write for particulars today!

**FOR HOLIDAYS  
AND PLEASURE  
LEARN LANGUAGES  
AT YOUR LEISURE**



**ELEMENTARY LANGUAGE COURSE** consisting of 15 conversational lessons— $3\frac{1}{2}$  i.p.s. approx. 1 hour £3.3.0d including handbook. New Russian Recording—£3.17.6d—16 lessons. Comprehensive Language Courses, approx 2 hrs. recording  $3\frac{1}{2}$  i.p.s. including handbook £6.6.0d Spanish, 3 hrs.—92 lessons, incl. South American Spanish £7.7.0d. All handbooks published by D. C. Heath & Co., Boston, Mass. U.S.A.

Please send me full particulars of your Rental Scheme and/or your Language Courses on Tape

Name .....

Address .....

Age .....

**TUTOR TAPE COMPANY**  
32 Orkney Street, London, S.W.11  
(Off Battersea Park Road) Phone MACauley 3999

## ROUND THE WORLD OF TAPE

### WALTHAMSTOW'S CARNIVAL WEEK

IF YOU are Walthamstow way on Saturday, May 28th, look out for the "through-the-streets" procession which starts their carnival, for one of the floats will be the work of the Walthamstow Tape Recording Society. A closed van with double-facing "Tape Recorder" on top, will give forth music as it goes along, via a tape recorder and rotary converter inside. Gaily-coloured and painted balloons will festoon the van. Club members will also be interviewing spectators on the route, giving a running commentary and taping the sounds of the procession. The resultant sound picture of the carnival will be edited into a programme for the local hospitals.

On Whit Monday, the Club will be operating a Record-Your-Voice Unit at the Carnival Fête being held on Monoux School Grounds. The proceeds are all going to local charities, so we wish you a sunny Whitsun, Walthamstow.



Mr. R. PISANIS (Director of Electro-Techno-Dynamics Ltd.) presents a gift of FERRODYNAMICS tapes for the Hospital and Blind Services. Mr. W. L. COLASSI (left) the Chairman and Managing Director, also presented a cheque for the Tape Bank.

### NEW ZEALAND BLIND GET TALKING-BOOK TAPE SYSTEM

The New Zealand Foundation for the Blind is to spend £95,000 changing its talking-book system from records to tapes. The new machines will cost £25 each and recording cassettes £8. A thousand machines and five thousand cassettes have been ordered for the change-over, which is expected to begin early next year.

Britain, Canada and Australia are joining New Zealand in this scheme, which one member of the Foundation described as "the biggest thing since Braille".

The tapes are encased in steel cassettes and have a life expectancy of twenty years. A book such as "Gone With the Wind" fills sixty of the present records. Now it will be fitted on to one cassette, taking twenty hours' reading.

The greatest advantage of the change-over is that the demand for popular books can now be met by dubbing extra copies as and when required. The benefit of this is clear when one learns that the waiting list for "The Cruel Sea" was so long that, theoretically, some people would have had to wait thirteen years!

## Round the World of Tape.

### AMATEUR THEATRE GETS MODERN SOUND

Leeds Art Centre, deciding to bring amateur theatre up to date, spent an extra £200 on the recent production at Leeds Civic Theatre of "Henry IV" to provide it with realistic sound effects. Two tape recorders connected to an impressive system of speakers provided battle sounds and martial music throughout the play.

### TAPE TRAILERS

A new idea appearing in theatres, comparable to the cinema's film trailer, is the tape trailer. "The Merry Widow" is one such show being publicised in this way. They send a special tape recording to the theatre at which they will next be appearing, and this is played in the interval of the current show. The recording lasts approximately seven minutes and consists of extracts from the show's songs performed by the actual cast.

### "THE LAST ANGRY MAN"

Paul Muni, currently starring in the film "The Last Angry Man", is one Hollywood actor who regards the tape recorder as an essential tool of his trade. He starts his rehearsing some time before appearing in a play or film by recording his part on to tape and then studying playbacks for characterization and intonation. Later he edits the tape and inserts every other part in the script—all spoken by himself.

Paul Muni is known as "the male Garbo" and his closest confidants are the tape recorders that he always has near by, at home or on the set. We should warn Mr. Muni that recorders always reveal secrets confided in them, when pressed!



Mr. A. WILLIAMS of Wilmex Ltd., (Importers of Irish Brand Recording Tape) presents a gift of IRISH tapes for the Hospital and Blind Services.

**TAPE BANK TRAIL—see Page 62**

# THE TSL PROGRAMME

## 1. ELEKTRON 4-TRACK STEREO RECORDERS REDUCED IN PRICE

This finely designed multi-channel full stereo recorder now costs you less! Every possible requirement is provided for, including direct live stereo recording. Can also be used as a mono instrument. No other recorder in its class offers such superb value at the price, and used monaurally, it can give up to 6 hours playing from a 5½ in. reel of long play tape.

**62 gns.**

## 2. TSL "VELETTE" RECORDER

Designed to provide high domestic standards of reproduction. 2 speed model, easy operation. Superimpose/mix control; built-in speaker; TSL MX3 Microphone, etc. Complete.

**29½ gns.**

## 3. CONVERT TO CONTINENTAL STANDARDS

with a genuine Telefunken Type F.402A Half-track Record/Playback head. Easily fitted to existing machines. Frequency range 30-20,000 c/s; gap - 0.00014 in. Guaranteed brand-new from factory at third usual price.

**2 gns.**

## 4. TSL "SOUND SPECTRUM"

Specially designed two-unit loudspeaker enclosure employing an exclusive high-flux bass unit and TSL-Lorenz Tweeter. Solidly built cabinet with piano finish in walnut veneers. Broad "panorama" front, with four modern legs. Loads up to 8 watts; extra broad frequency response. A true high fidelity reproducer with excellent transient response suitable in size for even small rooms. Excellent on stereo.

**19 gns.**

## 5. HARTING & KÖRTING 4-TRACK STEREO RECORDERS

Incomparably fine performance is offered by each of these instruments which are engineered to true professional standards.

**Harting 86 gns.**

**Korting 68 gns.**

## 6. TSL MICROPHONES

MX3 High fidelity crystal "stick" 45/-  
S.2 Stereo Dynamic 17½ gns.  
M.1 Dynamic (mono) 4 gns.

From leading stockists everywhere.  
Literature on request.

## TECHNICAL SUPPLIERS Ltd.

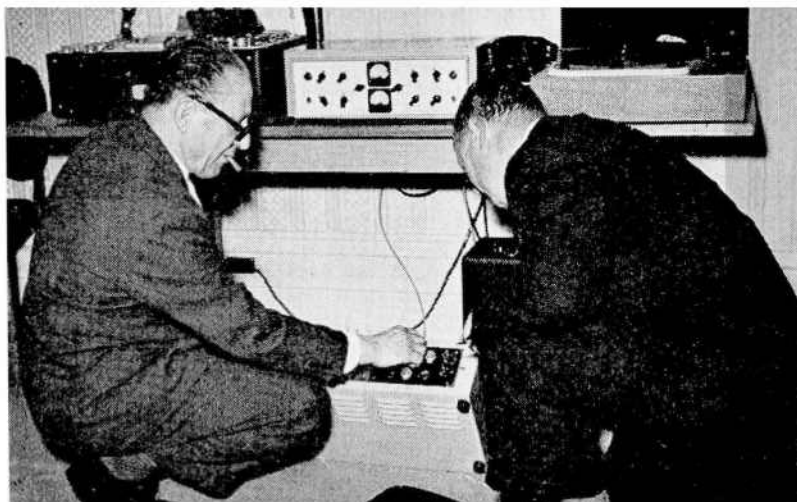
HUDSON HOUSE, 63 GOLDHAWK RD, LONDON, W.12

Telephone: SHEpherd's Bush 2581 & 4794





Paul Johnson and Joan Williamson discuss the Walter 404 (reviewed in our April Issue).



Getting down to it! Radio ham Jim Hunter (G6HU) (right) and S. A. Brown of Vortexion discuss the new two-channel mixer. The mixer, seen from the front is also seen on the display table.

## AUDIO FAIR, 1960

Starting young! Businessman H. D. Dredge explains the mechanism of a Grundig Tape Recorder to his son Russell.

Julie Andrews ("My Fair Lady") cuts the tape to open the Fair.





The Acos demonstrator was hard at it when we called on Room 111.

A feature of Scotch Boy's new 'One Five Special' tape for Tapesponders is the easy dispense pack. Tapesponding is now so popular that it needs self-service to satisfy the demand for tape.

# AUDIO FAIR, 1960

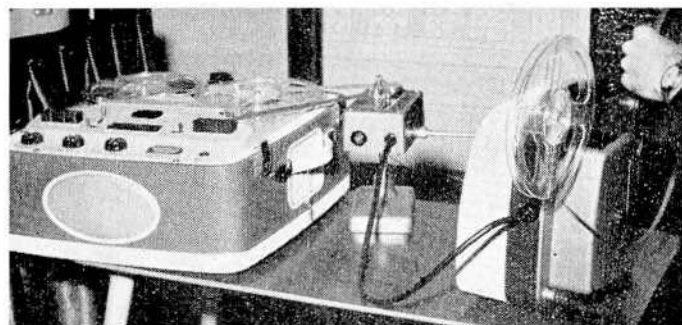
(right)  
The Fi-Cord 'works' shown in this demonstration case caused a great deal of interest on Stand No. 9. After seeing that visitors went upstairs to hear for themselves in the demonstration suite.

Centre (right)  
Specto of Windsor cater for more than sound alone. Here a Specto 8 mm cine projector is being laced up to put sound on film through the Spectone 161 Tape Recorder and the synchronisation unit.

Below (right)  
"I think I'll buy that when the Audio Fidelity range of records is in the shops" - Audio Fidelity on Stand No. 1

Fred Judd, our technical editor, was busy selecting machines for our 'Home View' series. We spotted him giving the Truvox R7 a pre-preview!

A Reslo microphone under-goes a practical test.





"This is the Record Player for me" - a charming visitor to Audio Fair selects her own record for demonstration in the Pamphonic room.



"If you would tell me, madam, the type of recordings you make, I am sure we can arrange a demonstration upstairs". The Lustraphone booth on the ground floor was a meeting ground for artists and technicians who require top quality microphones.



Joan Richards, from Dorchester, in Dorset, came up to Town - as a keen audio fan she was impressed by the new Garrard Tape Cassette and Deck, one of the Fair's most significant developments for 1960. 'It's as easy to put on as a disc' said Joan.

ON THURSDAY 21st April after weeks of steady, and on occasion, hectic preparation, the 1960 London Audio Fair opened at the Hotel Russell. It was apparent from the moment the doors opened that interest in the equipment to be exhibited had continued to increase since the previous Fair.

Despite the larger floor area available this year for the exhibitors' static displays, the growing importance of the event resulted in every square inch of space being pressed into service.

The rapid growth of interest in tape recording was reflected in a marked increase in the amount of equipment



(left)  
Joan Williamson was one of the first to record and post off an M.S.S. Voice Letter - specially designed for Tapesponding!



S. J. Robinson of Simon Equipment Ltd., demonstrates the Simon SP4 Tape Recorder.





"This is the Tannoy Dual Concentric Monitor system, and this is the speaker that powers it" - snapped in room 335.

Two pictures showing the versatility of the Jason exhibit. Test equipment and Amplifiers and pre-amp units.



displayed. A trend that was apparent was the increasing attention paid by manufacturers to the appearance of their equipment. No one will deny that the sensible equipment purchaser will devote his main attention to the functional ability of equipment, but excellent technical capability is no excuse for any slovenliness in presentation. A tape recorder owner must be able to live with his equipment as well as listen to its output. It was therefore encouraging to see that the majority of manufacturers have been

devoting considerable thought to this question. From the appearance aspect the new Truvox R.7, Ferrograph Series 4 and Ampex models were outstanding amongst a large selection of attractive models. Manufacturers should be encouraged in this trend as the more readily a tape recorder is accepted in the home the more rapidly will its general acceptance be effected and this can only be of benefit to all.

Most people have had the opportunity to see the restyled Ferrograph models and while restyling has

"These are the main features of the Ampex professional Portable Tape Recorder" - one of the young ladies on the Cintel staff prepares an engineer for his visit to the Ampex demonstration.

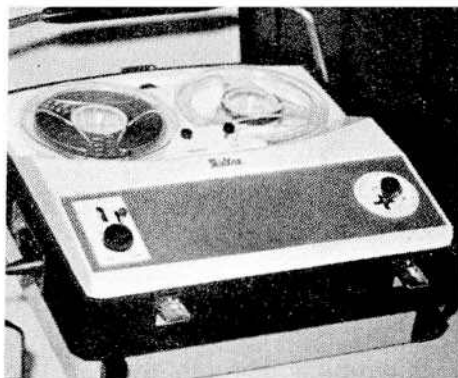
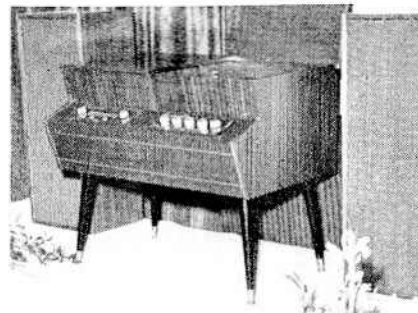
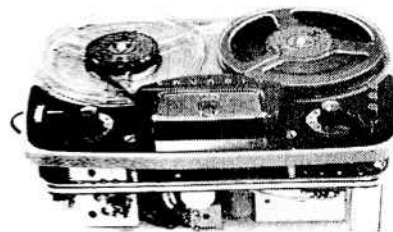
Here's a visitor who arrived early and was able to listen to the new lightweight portable Minivox Model C recorder in real comfort!





not been allowed to interfere with the functional considerations this company is to be commended on their good taste in design. The Truvox Company have in the past tended to concentrate on a first class design housed in a simple casing. It is therefore surprising to find that their new R.7. model is one of the most attractive designs yet seen on the British market, despite the fact that no sacrifice has been made on the mechanical side for reasons of appearance.

Not unexpectedly the Ampex instruments introduced to this country for the first time aroused considerable interest. Their designs, based on the idea of a rectangular box containing the necessary "works" suggests the



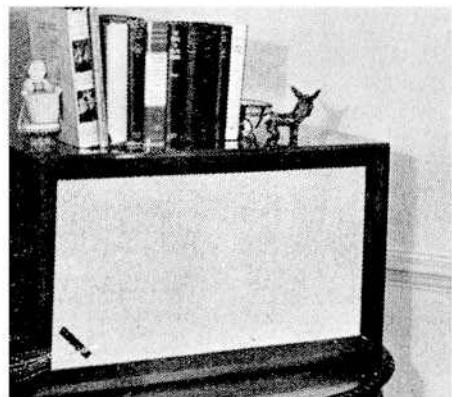
#### Top to bottom (left)

A charming demonstration! The model RP 341 "Nine Octave" Ekco record reproducer with matching stereo unit (model SU 341).

The Walter Transistor Tape Recorder - mains and battery driven, attracted a great deal of attention.

A Goodman speaker system for the sitting room.

France for fashion models - and for milady's portable stereo record player. The Teppaz player (left) and one of the speaker systems (right). The complete equipment is shown centre. Sole distributors: Selecto Gramophones Ltd., of London, S.E.1.



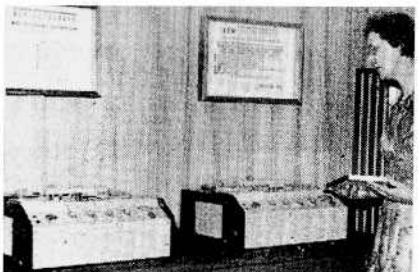
#### Top to bottom (right)

The Grundig T.M.20 Tape Deck.

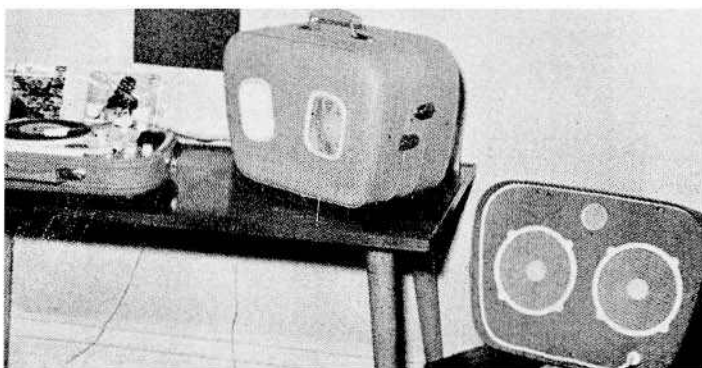
Elegance in stereo styling! The focal point in the Leak demonstration suite reflects the excellence of the 'works' - the amplifiers, pre-amplifiers and F.M. Tuner which Leak supply.

Another portable recorder utilising the Garrard Tape Deck and Tape Cassette. Trix is always to the forefront of new design.

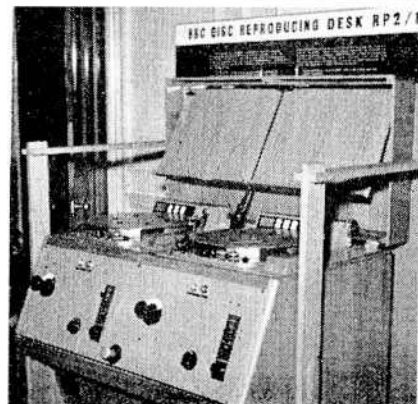
G. G. Chitnis advises a young visitor on the most suitable microphones for use with the Chitnis range of Tape Recorders.



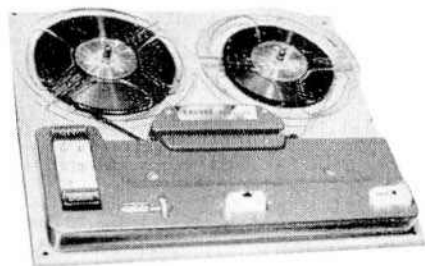
There were two new Reflectographs, on the left the Model A Professional model, on the right the Model B. Both attracted a great deal of interest from amateurs and professional sound men.



(right)  
The Disc Jockey's horse.







original tape recorders of the earliest days. The designers have in fact added the simplest and most attractive finish possible to the casing. The closest attention to detail and the exercise of excellent taste in this design has resulted in one of the most outstanding designs available, with results to satisfy the most discerning listener.

During the past year considerable hard work and ingenuity has been applied to the mechanical and electronic side of the tape recorder. In place of the "revolutionary ideas" of previous years the stage has now been reached where attention can be paid to improving tried and tested basic designs. A gradual trend of reduction in size and weight is making itself apparent, and this is largely being achieved without sacrificing quality. The well known Truvox R.2. is an excellent example. After many years as a favourite design it has finally made way for the restyled version, the R.6. Lighter, smaller and with a better deck layout which nevertheless incorporates most of the excellent features of its predecessor, the R.6 costs less and yet the results are a definite improvement. This is a trend that was repeated in varying degrees throughout this year's Audio Fair.

Also in evidence was the increasing use of sloping control panels in front of the tape deck. The layout in this fashion of Ferrograph and Brenell recorders is well known and popular. Elizabethan have now incorporated this system in



#### Top to Bottom (left)

Ronald Higgs, a London audio enthusiast, triggers off the Magnetophon 77K, Telefunken's 4 track stereo recorder.

The Truvox Mk. 6 Deck in Room 334.

A visitor from India discusses the Armstrong range of Hi-Fi equipment. The Simon Minstrelle does not require an external microphone - note the Minstrelle is also equipped with the Garrard Cassette Tape Deck.

In the Brenell demonstration room visitors could call on the company's range of recorders to play mono and stereo sound under typical living room conditions.

#### Top to bottom (right)

The Grampian record player - designed for schools, clubs, small halls etc - in fact anywhere where there is likely to be rough usage.

The Stuzzi Tricorder.

'On our left, our new H.M.V. tape recorder for the home; on our right, the professional E.M.I. recorder rack - part of the E.M.I. range on view.







**Above (left)**  
A visitor from SIERRA LEONE chats to Mrs. Wellington who manufactures the Wal range of accessories.

**Above (right)**  
The display card explains it all but this visitor preferred to see for himself how the Spectone 171, shown for the first time utilized the Garrard deck and Tape Cassette.



**(left)** The 'Innards' of some of Rogers Developments Equipment are examined with interest.

**Below (left)**  
Stereo in the sitting room—the Ampex record player/tape recorder stereo equipment.

their new "Major" model and Chitnis, Butoba, Grundig and Philips are all following this trend gradually but to a steadily increasing degree.

The Elizabethan "Major" is also an example of a move towards peak signal meters in place of the intriguing but less accurate "Magic Eye"; a welcome innovation that is of considerable assistance in avoiding distortion resulting from overloading.

Four-track recorders aroused considerable interest and several



**Below (right)**  
S. Vipharatana is studying in London, and found much of interest in the E.M.I. professional deck.



# IT'S SMART TO OWN A “MANNEQUIN”

AND IT'S THE BEST THAT MONEY CAN BUY!



Introducing

**The NEW**

**1960**

EXPORT MODEL

AS DISPLAYED AT THE  
LONDON AUDIO FAIR

MADE IN ENGLAND

**27 GNS.**

COMPLETE WITH ALL  
ACCESSORIES

- ★ BUILT-IN MIXER
- ★ SUPERIMPOSITION
- ★ MONITOR ON RECORD
- ★ TWIN TRACK
- ★ MAGIC EYE
- ★ FREQUENCY RESPONSE  
(90-10,000 cycles)
- ★ OUTPUT 2.5 WATTS
- ★ TONE CONTROL

- ★ EASIEST OF EASY TERMS
- FULLY GUARANTEED AND FREE  
SERVICE
- FREE DELIVERY ANYWHERE IN  
UNITED KINGDOM DISTANCE NO  
OBJECT

*Special Service to Professional Men, Schools and Educational Units*

---

To OSLO ELECTRONICS LTD., 10 LYONS PLACE, ST. MARYLEBONE, LONDON, N.W.8

Telephone PAD 8555

Please Supply FULL DETAILS OF THE NEW 1960 “MANNEQUIN” EXPORT MODEL

Name .....

Address .....

Town.....

---



(above)  
Professional Ampex equipment is out of the reach of most of us, but it's nice to see and hear it at work. Here it's the climax of the Ampex demonstration when realism in sound reproduction through three, not two channels, was brought to the living room!

(left)  
Some of the hundreds of people who saw the B.A.S.F. film, 'The Magic Tape' which is available on free loan and explains the many uses of magnetic tape. The film is already a prizewinner at international film festivals and was seen for the first time in Britain at the Audio Fair.

excellent models were on show including the Harting, Körting and Elektron. It is apparent that no economically practicable solution has been found to the problem that reducing the tape head gap length reduces the signal strength thereby requiring additional gain which results in a decrease in the signal-to-noise ratio. This means that any enthusiasts wishing to benefit from the economy of tape that may be achieved by using four-track equipment must be prepared to pay the price if satisfactory results are to be obtained.

Stereo on tape was much more in evidence than in previous years and all manufacturers were showing a keen if wary interest. Ferrograph, Ampex, Multimusic and Brenell displayed stereo equipment and the demonstrations, commendably free from gimmicks, convincingly displayed the advantages of Stereo Tape when

(right)

Club members from all parts of the country dropped in for a chat at A.T.R.'s Stand. Alan Lovell, Hospital Services Secretary records impressions on the portable Steelman recorder. (left) Alec Alexander, B.R.C. Secretary and Ken Peters (right), A.T.R.'s Deputy Editor give moral support!



compared with Stereo discs. While the few new stereo microphones available are enjoying justifiable success, there was growing support amongst the microphone manufacturers at the Fair for balanced and phased pairs of individual units, separated by acoustically dead material such as foam plastic.

The improved appearance of Tape equipment was paralleled by more care in presentation of high fidelity components. The trend in this field was towards improved appearance with simplified systems of interconnection by the layman working from simple instructions, and with a heavy emphasis on Stereo.

Characteristic of most loud-speaker displays was acceptance of the fact that in most homes they must be capable of being absorbed into the furnishing scheme of normal living rooms. Smaller cabinets, attractively styled were much in evidence. Wharfedale demonstrated an excellent idea utilising a standard 8 in. speaker in a colour washed 9 in. sewage pipe that would present no insurmountable problems in blending into furnishing schemes, had the

*Continued on page 17*





# No Interest?

Our glamorous young lady may not interest you !!! But our tremendous range of tape recorders most certainly will.

Don't buy a Tape Recorder !! At least not before visiting our London showrooms. If you live in or near London nowhere else can you obtain so many of the features listed below. If you are unable to make a personal call our Express Mail Order department is at your service, offering you the speediest delivery with the absolute minimum of fuss and delay.

## REMEMBER

- ★ *Nowhere else can you see, hear and compare so many types.*
- ★ *Nowhere else can you obtain such easy H.P. terms.*
- ★ *Nowhere else can you obtain such 100% after sales service.*
- ★ *Nowhere else can you get such good Free Technical Advice.*
- ★ *Nowhere else can you obtain such speedy Mail Order Service.*

**\* SPECIAL FREE TAPES & ACCESSORIES  
OFFER TO PERSONAL CALLERS ONLY**

## RECORDERS STOCKED

Alba, Elizabethan, Brenell, Ferrograph, Fidelity, Elpico, Simon, Grundig, Telefunken, Vortexion, Walter, Reflectograph, Harting, Philips, Stella, Spectone, Veritone, H.M.V., Stuzzi, Saja, Regentone, Reps, Minivox, Korting, Clarion, Wyndson, Portogram, Crown, Fi-Cord, Truvox, Gainsborough, Norfield, Amplion, Elektron, Sound, EAR, GBC, Perth, Kurland, Saba, TSL, Trix, Winston, Collaro, Wearite, Steelman, Uher, B.S.R., etc., etc.

# **ESSEX TAPE RECORDER CENTRES**

2 Maryland Point Station, Stratford,  
London, E.15 (Head Office)  
Telephone: MARYland 5879

205 High Street North, East Ham,  
London, E.6 (opp. East Ham Station)  
Telephone: GRAngeWood 6543

# THE EXHIBITORS AND THEIR PRODUCTS

**Cosmocord Ltd.**  
Eleanor Cross Road, Waltham Cross, Herts.  
**ACOS. Hi-Light pick-up.**  
**Acoustical Manufacturing Co. Ltd.**  
Huntingdon, Hunts.  
**ACOUSTICAL. Amplifiers and pre-amps, loudspeakers and tuners.**  
**Politechna (London) Ltd.**  
3 Percy Street, London, W.1.  
**A.K.G. Cardioid microphones, condenser microphones and stands.**  
**Ampex International S.A.**  
1 Rue des Pilettes, Fribourg, Switzerland.  
**AMPEX 601 & 601-2. Portable tape recorders, twin tracks.**  
**Rank Cintel Ltd.**  
Worsley Bridge Road, London, S.E.26.  
**AMPEX. Professional tape recorders.**  
**Armstrong Wireless & TV Co. Ltd.**  
Walter Road, London, N.7  
**ARMSTRONG. Amplifier and pre-amps, latest model V.H.F. F.M. tuner T4, self-powered.**  
**W. & N. Electronic**  
80/2 Uxbridge Road, London, W.5.  
**AUDIOMASTER. Amplifiers, loudspeakers, tuners.**  
**Audio Fidelity (England) Ltd.**  
44 Crawford Street, London, W.1.  
**AUDIO FIDELITY. Records.**  
**Beam Echo Ltd.**  
13 South Molton Street, London, W.1.  
**AVANTIC. Amplifiers and pre-amps, loudspeakers and tuners.**  
**F. A. Hughes & Co. Ltd.**  
4 Stanhope Gate, London, W.1.  
**B.A.S.F. Recording tape. "The Magic Tape" film.**  
**Brenell Engineering Co. Ltd.**  
1a Doughty Street, London, W.C.1.  
**BRENELL. Tape recorders and decks, mixers and amplifiers.**  
**Denham & Morley Ltd.**  
Denmore House, London, W.1.  
**BUTOBA. Battery transistor, portable.**  
**Celestion Ltd.**  
Ferry Works, Thames Ditton.  
**CELESTION. Stereo g44/1300, two 12in. speakers.**  
**C. T. Chapman (Reproducers) Ltd.**  
Chapel Lane, High Wycombe.  
**CHAPMAN. Tuners, amplifiers and pre-amps.**  
**Chitnis Electronics Ltd.**  
1 Long Acre, London, W.C.2.  
**CHITNIS. Tape recorders, mono and stereo.**

**A. R. Sugden & Co. (Engineers) Ltd.**  
Market Street, Brighouse, Yorks.  
**CONNOISSEUR. Transcription turntable, Mk. III stereo pick-up. Amplifiers and pre-amps.**  
**Decca Radio & TV**  
Ingate Place, London, S.W.8.  
**DECCA. Stereo Decola. Records, pick-ups and cartridges.**  
**Design Furniture Ltd.**  
Carnworth Road, London, S.W.6.  
**DESIGN FURNITURE. Cabinets, loudspeaker enclosures.**  
**Dynatron Radion Ltd.**  
Furze Platt, Maidenhead.  
**DYNATRON. Mazurka stereo record player and loudspeaker systems.**  
**E. K. Cole Ltd.**  
Ekco Works, Southend-on-Sea.  
**EKCO. RP341. Stereo record reproducer.**  
**E.A.P. (Tape Recorders) Ltd.**  
Bridge Close, Romford, Essex.  
**ELIZABETHAN. Tape recorders, tuners.**  
**E.M.I. Sales & Service Ltd.**  
Hayes, Middlesex.  
**E.M.I. Tape recorders, tape, record reproducers.**  
**E.M.I. Records Ltd.**  
8/11 Great Castle Street, London, W.1.  
**E.M.I. Records, pre-recorded tapes.**  
**Electronic Reproducers Ltd.**  
Porters Wood, St. Albans, Herts.  
**E.-R. Stereo 60. Ceramic pick-up cartridges.**  
**British Ferrograph Recorder Co. Ltd.**  
131 Sloane Street, London, S.W.1.  
**FERROGRAPH. Tape recorders, including the 808 stereo/mono recorder.**  
**Fi-Cord Ltd.**  
40a Dover Street, London, W.1.  
**FI-CORD. Model for underwater work completely enclosed in waterproof Perspex case and remotely controlled.**  
**The Garrard Engineering & Manufacturing Co. Ltd.**  
Newcastle Street, Swindon, Wilts.  
**GARRARD. Magazine loading deck. Record changers and pick-ups.**  
**General Electric Company**  
Magnet House, London, W.C.2.  
**G.E.C. Amplifiers and pre-amps. Loudspeakers, microphones and tuners.**  
**The Goldring Manufacturing Co. (G.B.) Ltd.**  
High Road, London, E.11.

**GOLDRING. Pick-ups and cartridges. Transcription turntables, balances.**  
**Goodmans Industries Ltd.**  
Wembley, Middlesex.  
**GOODMANS. Loudspeakers, enclosures and systems.**  
**Grampian Reproducers Ltd.**  
Feltham, Middlesex.  
**GRAMPIAN. Amplifiers and pre-amps. Guitar amplifiers, loudspeakers, P.A. equipment, record players.**  
**Grundig (Great Britain) Ltd.**  
Sydenham, London, S.E.26.  
**GRUNDIG. Tape recorders, heads, loudspeakers, microphones and decks.**  
**The Gramophone Co. Ltd.**  
Hayes, Middlesex.  
**H.M.V. Tape recorders, amplifiers and pre-amps, record reproducers.**  
**Wilmex Ltd.**  
131 Sloane Street, London, S.W.1.  
**IRISH BRAND. Recording tape, tape splicer, SP3.**  
**The Jason Motor & Electronic Co.**  
Great Chapel Street, London, W.1.  
**JASON. Kits, amplifiers and pre-amps, tuners.**  
**H. J. Leak & Co. Ltd.**  
Brunel Road, Westway Factory Estate, London, W.3.  
**LEAK. Varislope stereo pre-amp, amplifiers, loudspeakers and tuners.**  
**The Lowther Manufacturing Co.**  
St. Mark's Road, Bromley, Kent.  
**LOWTHER. Loudspeakers, pick-ups, transcription turntables.**  
**Lustraphones Ltd.**  
St. George's Works, Regent's Park Road, London, N.W.1.  
**LUSTRAPHONE. Amplifiers and pre-amps, microphones, P.A. equipment.**  
**Challen Instrument Co.**  
St. Michael's Road, London, S.W.9.  
**MINIVOX. Tape recorders, amplifiers, disc reproducers.**  
**M.S.S. Recording Co. Ltd.**  
21 Bloomsbury Street, London, W.C.1.  
**M.S.S. Amplifiers and pre-amps, disc recorders, loudspeakers, mixers.**  
**Mullard Ltd.**  
Torrington Place, London, W.C.1.  
**MULLARD. Transistors and valves.**

Continued on Page 43



Above (left)  
T.S.L. have such a large range of recorders that they made up a switch-over so that they could all be demonstrated without tears.

Above (right)  
It's sometimes a little difficult to understand all about this stereo business. Warfedale supply the loud-speakers - and advice as well.

advantage of cheapness, and was remarkably effective from the sound aspect.

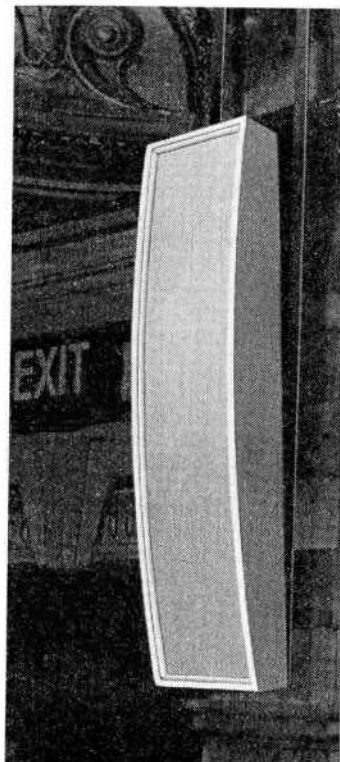
The most welcome trend at the Fair was the use of more discretion in the handling of volume controls, although few visitors will forget the three demonstrators on the first floor determined to fight the volume war to the death.

Incidentally, I have been asked frequently, since the Fair, for the name of the excellent Stereo disc so favoured by Demonstrators this year. The record, justifiably popular, is a Polydor LP entitled "Ole".

Stephen Ross.

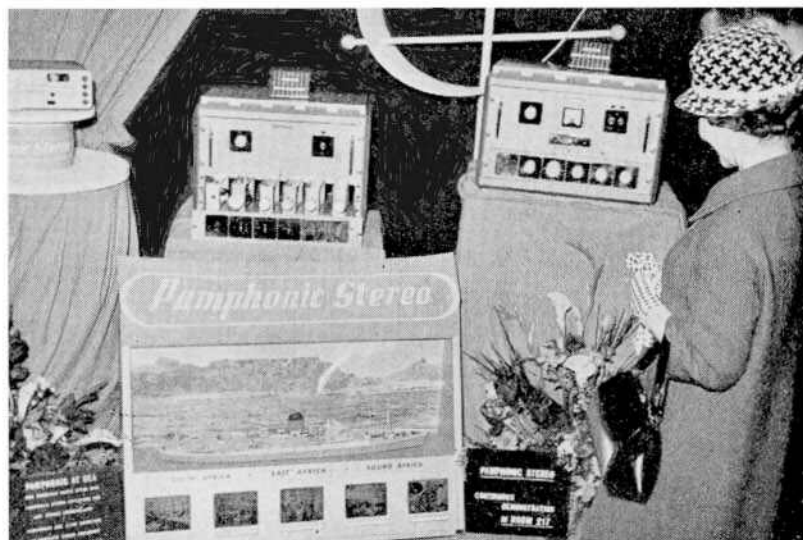
(right)  
The Standard Telephones and Cables Ltd., Stantel curved column speaker for Public Address Systems.

(below)  
Laying on a demonstration programme is a highly professional business. Here is a Pye engineer at the Console in Pye's demonstration room.



Below (left)  
Pamphonic's eye-catching display in the Main Hall made more than one visitor dream of cruises, lazy holidays, soft music...!

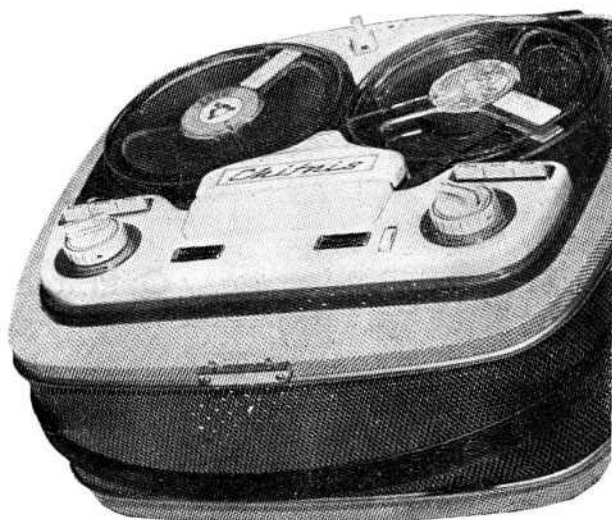
Below (right)  
The Butoba portable recorder looks good - and sounds good too. Denham & Morley Ltd., who import them also import miniature radio sets - this visitor evidently had one already!





# Chitnis

## 4 & 2 TRACK TWO SPEED RECORDERS



Mixing facilities, better arrangement of controls; powerful silent running motor by Papst and a really smartly styled lockable case make owning a Chitnis Recorder really worth while; and the four-track model halves tape cost and storage problems. The Bogen heads fitted ensure genuine hi-fi performance at  $3\frac{1}{2}$ " ps. giving a response from 30-16,000 c/s  $\pm$  3 dB. Signal noise ratio is better than 55 dB unweighted. Speeds  $3\frac{1}{2}$  and  $1\frac{1}{8}$  ips. Chitnis Recorders are robustly built, easily carried and as suitable for professional use as for the family.

KM. 22	KM. 33
TWO TRACK	FOUR TRACK
54 GNS.	62 GNS.

Complete with Chitnis Dynamic Microphone  
M.50/Tr and Tape

### STEREO MODELS

Chitnis 2-speed 4 and 2 track recorders complete with two speakers (one in lid) will be showing at The Audio Fair. Leaflet gladly sent on request.

WE ARE SHOWING AT THE AUDIO FAIR  
Booth 11 and Demonstration Room 113

Leaflets on  
request from :

**CHITNIS ELECTRONICS LTD.**

Tel: COV 2052

1, Long Acre, London, W.C.2



"Mary, they've taken all our A.T.R's!"

Luckily there are still a few copies of the first editions of **Amateur Tape Recording** left, at 2/- each (post free).

Apply to : A.T.R. (Dept. B.N.)  
145 Fleet Street,  
London, E.C.4.

## AMATEUR TAPE RECORDING

Magazine is published on the 20th of each month  
and is obtainable from all newsagents.

WHY NOT ORDER YOUR COPY

# NOW !



### FIRST BIRTHDAY PLANS

Plans will be announced in the next issue (July) of  
the new A.T.R. which will appear in August.

WHY NOT ORDER YOUR COPY

# NOW !

AMATEUR TAPE RECORDING

# B. R. C.

## Badges

2/9d each, post free

OVERSEAS: 3/- (50 cents, U.S.)

PLEASE SPECIFY BUTTONHOLE  
OR BROOCH FITTING

• • • • •

### CLUB AFFILIATION TO THE B.R.C.

A.T.R. Magazine extends a cordial welcome to the Clubs listed below who have recently become affiliated to the British Recording Club.

The Secretaries of these Clubs will be delighted to forward details of their activities to local residents who are interested:

Hazells Tape Recording Club,  
Hazell, Watson & Viney Ltd.,  
J. H. Harry (Secretary),  
Britannia Street,  
Aylesbury,  
Bucks.

Northallerton Tape Recording Club,  
Geo. F. Clegg (Secretary),  
5, Friarage Mt.,  
Northallerton,  
Yorks.

Eagle Tape Society,  
W. C. Walker (Secretary),  
252, Plashet Grove,  
East Ham, E.6.

Gravesend Tape Recording Club,  
Linda Palmer (Secretary),  
c/o. 46, St. James Avenue,  
Gravesend, Kent.

Huddersfield Tape Recording Society,  
G.R. Parks (Secretary),  
175, Newsome Road South,  
Newsome,  
Huddersfield.

Rochdale & District Cine Society,  
A. Ashworth,  
Ass. Programme Secretary,  
551, Bury Road,  
Rochdale.  
G. R. Parks (Secretary),

### SERVICES "SPECIALS".

A.T.R. Magazine is also proud to announce that the Caledonia Tape Recording Society, the Navy's first Tape Club has now become affiliated to the B.R.C.  
Any Navy types interested in organised Tape Recording are advised to send a "signal" to:

R.A.S. Fields,  
C.P.O.'s Mess,  
H.M.S. "CALEDONIA",  
Rosyth,  
Fife, Scotland.

Hot on the heels of the Navy's decision has come the news that R.A.F. Ampert Tape Recording Club has decided to take the air and join the B.R.C. ranks.

All R.A.F. Personnel are invited to "touch down" and contact:

S. Rumens (Secretary),  
P.3. Drafting,  
Head Quarters,  
Maintenance Command,  
R.A.F. Ampert,  
Andover,  
Hants.

YOU WILL NEVER KNOW HOW  
GOOD YOUR RECORDER CAN BE  
UNTIL YOU CHANGE OVER TO A



## BRITISH-MADE MICROPHONE

*There's a model for  
every requirement*

Consistently chosen for use on stage screen, TV, record and radio LUSTRAPHONE MICROPHONES are specified leading recorder manufacturers because of their quality and reliability. You can buy a LUSTRAPHONE DYNAMIC MICROPHONE from as little as 67/6. Literature gladly sent on request.

**LUSTRAPHONE LTD.** ST. GEORGE'S WORKS,  
REGENTS PARK RD., LONDON, N.W.1  
Phone: PRIMrose 8844

## R. K. APPLEBY LTD.

KIN 1275

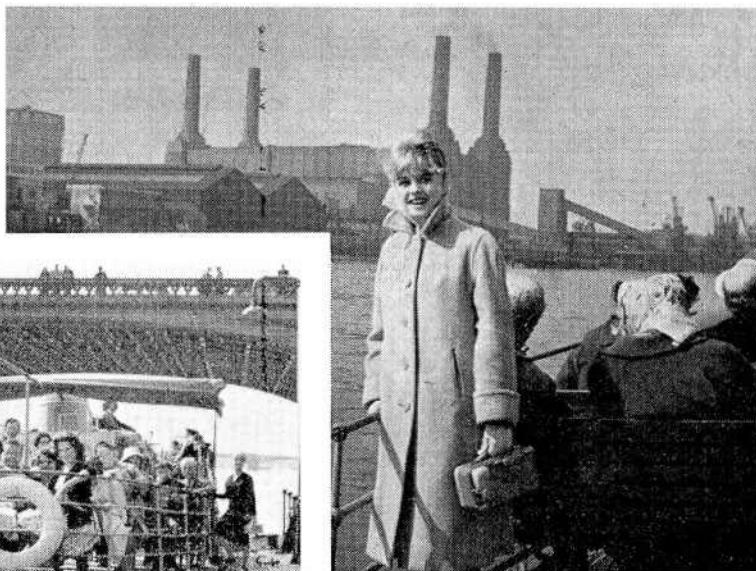
HI-FI EQUIPMENT & RECORDS  
30 LONDON ROAD  
(Near C. & A.s)  
KINGSTON-UPON-THAMES



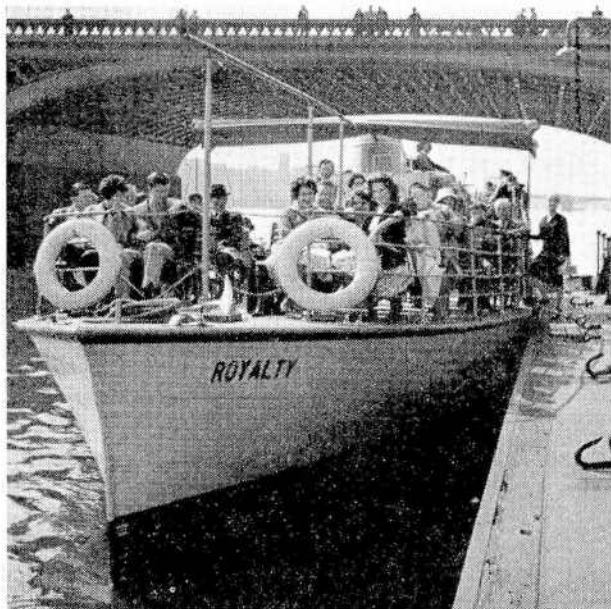
HI-FI EQUIPMENT  
TAPE RECORDERS  
RECORDED TAPES  
RECORD PLAYERS  
RECORDS

ALL TAPE ACCESSORIES, SPEAKERS  
DECKS, PRE-AMPS, ETC.  
H.P. TERMS AVAILABLE  
SIMON—GRUNDIG—TELEFUNKEN SERVICE

(right)  
The "Upturned Table"  
(Battersea Power Station)



Embarking at Westminster  
(below)



## TAPE-VIEW AFLOAT

by Jan Phillips

FOR CENTURIES, the Thames was London's main thoroughfare. In those days, instead of calling "Taxi" you called "Oars", and one of the thousands of wherries would pick you up. Those days have long since gone and it is only in the last few years that water-buses have reappeared. Pleasure trips have been with us longer, and one of these is this month's tape-view. The trip chosen was the one to Kew, so on a bright and sunny (lucky me!) Sunday morning I walked along the Embankment to Westminster Pier, which nestles under the shadow of Big Ben, and booked my passage.

The boat departures are all on the hour or half-hour, so they get their signal to depart from the most famous bell in the world. At eleven o'clock those familiar tones rang out, we settled in our seats on Thames Launches' motor vessel *Royalty*, and she slowly moved off from the pier.

Captain Waghorn then tugged off two thunderous toots that gave my poor little recorder an acute attack of over-modulation. I won't pick that particular seat again! The toots were to let all other craft know that we were about to turn, and soon we were gliding past St. Thomas's and the Houses of Parliament, with the Halls, Festival and County, disappearing behind us.

Captain Waghorn gave us a running commentary as we travelled along. It is an amazing ten miles of river, packed with more variety, interest and history than any ten miles of any other river in the world.

Well, that's my "view" and I challenge anyone to disprove it. Nearly every facet of life is represented somewhere along the journey. First comes Government, local and national (County Hall and the Houses of Parliament), then Health, physical and spiritual (St. Thomas's Hospital and the Lambeth Palace, which has been the official London residence of the Archbishop of Canterbury for the last 700 years). Continuing on our way, we came to the Chelsea Old Soldiers' Home, where I hear they have tape-recorded services, so they are keeping up with the times. The Tate Gallery, representing the Arts, made a fine picture as we passed by. The statue of Britannia surmounting the building has the trident in her right hand, which anyone looking at a penny will see is most unusual.

I have not mentioned Sport, but as our trip included a stretch of river from Putney to Mortlake, I think 'nuff's said. We passed dozens of rowing enthusiasts in their twos, fours and eights. I wonder why boatloads are always divided so mathematically? Never a three or a six. I was glad to see a ladies' eight out. They seemed to be chasing a men's eight, but that was probably coincidental.

The boat passes under fifteen bridges on the way to Kew. Each bridge is different and has its own interest. The Vauxhall Bridge has a collection of statues, one of which is holding a model of St. Paul's Cathedral. The Albert and Victoria Suspension Bridge still has its toll gate at each end. Another suspension bridge, Chelsea, has a springing distance



of 5in. in the centre, which almost puts it in the trampoline class. And each bridge forms an echo chamber as one passes beneath it.

Passing under Hammersmith Bridge seemed to bring us into the yacht world, for there was a great cluster of them—or perhaps the collective term is “breeze”—circling round in apparently aimless fashion. It was actually the start of a yacht race, which I think we postponed temporarily by our appearance.

Swans were in evidence all the way, and some of them seemed distinctly ruffled by the breeze the yachtsmen were enjoying and were acting in a very “peckish” way to their companions.

We then went below deck to have a look at the *Royalty's* luxury lounge, where I met Mr. Thuillier. He is the General Manager of Watermen Caterers (who are the victualling caterers for all these boats) and a delightful host. Incidentally, the bar is open all the time . . . and suddenly we had arrived at Kew.

We disembarked, watched the *Royalty* continue on her way to Richmond, and then went to sample some Kew-fare.

The great attraction at Kew is of course Kew Gardens, which form a gardeners' wonderland. They are the largest botanical gardens in the world, with almost every known variety of shrub, tree and flower. They started as an Exotic Garden in 1760. The great conservatory contains plants in flower all the year round. The Gardens are also a perfect setting for an afternoon nap, to sandwich between boat trips.

But, all too soon, it was time for the return journey, and we ended up running along the tow-path waving frantically to the *Hurlingham*, which was on the point of leaving. However, Captain Burgess saw us coming and kindly waited.

Having “viewed” on the way to Kew, I spent most of the return journey prowling round the boat looking for “sounds”. I found one interesting spot over the stern of the boat, where one could catch the sounds of the propeller thrashing through the water. It was an “Out of Bounds” part, so I asked the captain's permission to climb down to this. He agreed, provided the mate didn't mind standing by ready to dive in to my rescue when I fell in. Fortunately he didn't and I didn't.

Slowly the London landmarks reappeared and we



(above)  
Floating commentary.



(right)  
Captain Burgess points  
out one of the in-  
teresting features of  
the river.

knew we were reaching the end of our journey. Battersea Pleasure Gardens were in full swing as we passed; the paddle-wheel of their model Mississippi river boat was thrashing round gaily but ineffectually, and larger wheels beyond could be seen heaving humanity up and down. Then we were under the bridge and slipping past the power station, which looked for all the world like a giant's upturned table.

A visit below deck to the lounge for a coffee, and we were back to our starting point. Cost of the return ticket? Five and sixpence, very well spent.



(left)  
Jan interviews Mr.  
Thuillier in the bar.



(right)  
Recording “out of  
bounds” sounds.

**Brown Band 195**  
(Acetate base)

600'	5" spool	17/-
850'	5½" spool	23/-
1,200'	7" spool	27/6

**Green Band 211 \***  
(Acetate base)

600'	5" spool	21/-
850'	5½" spool	28/-
1,200'	7" spool	35/-

**Long Play 601 \***  
(Mylar base)

225'	3" spool	9/-
900'	5" spool	28/-
1,150'	5½" spool	35/-
1,800'	7" spool	50/-

**Double Play 724 \***  
(Tensitized Mylar base)

300'	3" spool	13/9
600'	4" spool	25/-
1,200'	5" spool	45/-
1,650'	5½" spool	52/6
2,400'	7" spool	80/-

\* Ferro-sheen process

# irish BRAND AMERICA'S FAVOURITE TAPE

Optimum fidelity is ensured by the exclusive Ferro-sheen process—an integral part of the tape manufacture—which offers the following distinct advantages:



Exceptional high frequency response, due to intimacy of contact between tape and heads.



Minimum head wear.



Freedom from head contamination by oxide build-up.



Considerable reduction in background noise.



Minimum drop-outs (temporary loss of signal).

**IRISH Brand Tapes** are produced by Orr Industries Inc.—a division of the **AMPEX CORPORATION**—thus a combination of the Masters of Tape Manufacture and the Masters of Sound Equipment cannot fail to produce a tape of the highest quality.

**IRISH BRAND SP-3 TAPE SPLICER.** The only Tape Splicer available incorporating twin cutting devices. Produces professional-style splices in a few seconds, without scissors or razor blades. **Price 67/6**

Sole Distributors:

**WILMEX LTD · 70 ST. STEPHEN'S HOUSE · BRIDGE ST · LONDON S.W.1**

## kurland KONSOLLETTE

*a tape recorder of superb quality by KRS*

- \* Utmost reliability \* Technical perfection
- \* Finger-tip simplicity of operation

The quality-beyond-question specification is based on a masterpiece of *printed-circuit* design; the tape deck is the most up-to-date 3-speed unit by Collaro (with space for stereo head); there are full monitoring and superimposing facilities; pause control; magic eye recording level indicator; straight through amplifier feature; 6-valve amplifier, with monitoring through the high-flux speaker. Technical performance levels conform to the most critical limits of tolerance to ensure utmost fidelity of recording and reproduction.

**Also available: the 'CONTEMPORARY' TR7m—56 Guineas (inclusive)**



*the symbol of supremacy in the world of sound*

Write for fully-descriptive literature to:  
**KURLAND RECORDING SYSTEMS LIMITED**  
Dept. KK · Tilly's Lane · High Street · Staines · Middx



*hi-fi*  
**PRINTED CIRCUIT**  
*all-British*

**38**  
**GUINEAS**

*including microphone, extension lead, plugs and tape.*



By LORNA GULSTON

I WONDER if, like me, you have a mental list of "People I'm Panting to Meet"? Mine dates from Boadicea, through Shakespeare, Casanova, Keats and Emily Brontë right up to Nancy Spain, for whom, bless her, I have a ferocious admiration. The fact is, I'm fascinated and stimulated by the off-beat homo sapiens—but it's an old adage that you can have too much of a good thing (after all, Adam only wanted a rib and look what HE got, and serve him right anyway), which is why I blanch and shudder every time I remember a certain morning just before Christmas when I encountered more eccentricity than even I could cope with.

Incidentally, this chain of thought was initiated by the circumstance that at this very moment I'm being borne languidly in the direction of London from the precincts of Lime Street Station, Liverpool, by a railway engine which appears to have hiccups. The carriage (2nd class, and scruffy enough to remind the impecunious that you can't expect much if you won't bankrupt yourself and travel 1st), is inhabited by a number of very ordinary, wholesome Northern Irish folk who came across on the boat from Belfast with me last night. They're mostly reading, or smoking, or staring out of the windows with that expression of glum resignation habitual to travellers, and not one of them would dream of disturbing my labours, even though they're consumed with curiosity as to what I'm writing, so I should have a peaceful few hours—especially since I haven't the Fi-Cord in tow.

It was really the Fi-Cord which started it that last time, but then when I tucked myself into an empty carriage and settled down to an interesting paperback I couldn't foresee the consignment of Trouble which would shortly descend on me. Just as the train was on the point of pulling out there was a clatter of feet, a strident voice giving a great many orders, and then a harassed porter hurled himself through the door, pitched an armful of luggage on the rack, and bundled in a wave of humanity which spilled on to the seats with grunts and sighs and whimpers and gasps, and I glanced up to behold a sight of some considerable horror.

In the corner, red-faced and steaming, crouched an anaemic young woman clutching a fat baby with a dummy in its mouth which gave it a sinister and raddled expression, and by her side a small boy of

circa 7 years sat drumming his heels on the seat and wiping his nose with the back of his hand. But this, though unprepossessing, was not all. In the other corner was sprawled a veritable mountain of a woman wearing a fur coat so large that it might have been stripped off the Yeti itself. On her knee reposed a cat-basket, and she was flanked by two winded corgis with lolling tongues and an air of desperation, as if they had reached the limit of their endurance, which they probably had.

"Yeah," exclaimed the She-Monster, in a rich mid-Western drawl, "that sure was a near thing, wasn't it, honey?"

"Honey" appeared to apply to the anaemic woman, who nodded and said "Yes" in a timid whisper. The pudgy American flashed a smile of triumph in my direction.

"But we made it, and I guess that's all that counts. I said to the cab-driver 'Look boy,' I said, 'You drive like crazy and get us to that train, and I'll make it worth your while'. Lucky you met up with me, honey, so you could share the cab, else you'd have missed it for sure".

The pallid woman nodded, and I felt vaguely guilty, as if to have arrived at one's leisure fifteen minutes before departure time were somehow unsporting and a subtle form of cheating.

I resigned myself for the rest of the journey to an uninterrupted monologue by the fur-coated dynamo (wondering why she wasn't travelling 1st class), but I hadn't reckoned with the turn of the screw which was to follow. Now those of you who own portable recorders will know that with the lid closed they give an excellent impersonation of a transistor radio, and I have always relied on this comfortable bulwark of misinterpretation to protect me when travelling. This time, however, the dice were all loaded against me. We were just being treated to a story of *Mister American Monster's* wit on his cattle-ranch in Texas.

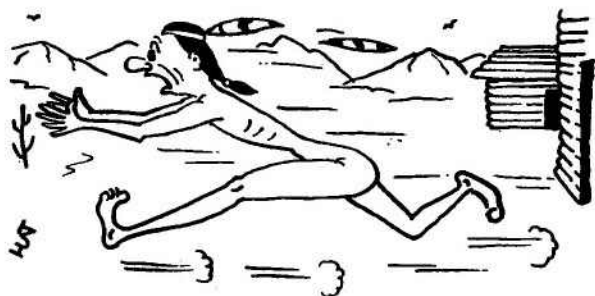
"And so there was this pore ole Injun Willie who worked around the ranch-house, and when my husband played the tape recorder ole Willie thought it was bad medicine, and he hopped out of bed, *wham*, and ran out naked as the day he was born, and hid behind some bushes, and my man found him squatting there, shivering and shaking, and d'you know what my man said?"

We didn't, but it was of no consequence. She was



about to tell us anyway.

"Well, my man he just laughed like crazy, and he said 'Willie, I guess I'm gonna re-christen you 'Sittin' Bare'—'Sittin' Bear'—Bare—get it?'"



We got it. The snuffling little boy took a fit of giggles and writhed about on the seat, while his mother tittered and the baby made strangled sounds. Our raconteur roared with full-blooded wheeziness at her own humour, but all of a sudden her laughter sank away, like gas when the meter wants a shilling, and she bent her piercing gaze on the Fi-Cord.

"Gee, honey, is that a lil' tape machine?" she asked.

Truth and duplicity battled for supremacy in my mind, but as she was quite capable of snatching the recorder from my hand to check I thought it better to own up.

"It is," I admitted.

"Now isn't that just crazy?" ("Crazy" appeared to be her pet word). "Say, honey, we can have some fun. You don't know it yet, because I haven't introduced them, but Eleanor and Franklin D. (after the Roosevelts, you know) are very, very clever lil' dogs, aren't you, cuties?"

The corgis peered into her face with apprehension.

"They sing, you know," she went on, "In harmony. I bought them from the friend I'm vacationing with. 'Matilda,' I said, 'I MUST, but MUST, have those darling lil' dogs, and . . .'"

The history of their acquisition was lengthy and involved, but eventually the frightful moment arrived when the performance was to begin ("I'd just adore to have a record of them in a real English locomotive"). With my heart somewhere about my knees, I switched on and waited unhappily for results.

"Dooow" sang the proud owner of the duettists, "Doow, Meee, Soow, Dooow".

Franklin D. necked up and licked her face. Eleanor sneezed.

"Dooow, Meee, Soow, Dooow," moaned our tormentor once more, "Come on, cuties—with me, now—doow, meee, soow, doooooow".

The corgis remained mute, but a shocking wail came from the cat basket.

"Poor lambs," cried the indefatigable woman, easing the lid of the cat basket up. It was violently thrust from her hand, and two indignant Siamese battled their way out. I have a passion for cats, which is just as well, because they both sprang on to my knee and sat there like Disney creations, still as sphinxes, squinting round with their blue, blue eyes. What on earth was going on the tape I hadn't an idea and I could scarcely have cared less. The fat

baby coveted the cats and strained towards them, screaming with frustration because they were out of reach. The anaemic woman delved into a basket and produced a sucking bottle which she plunged into the baby's mouth.

The boy, overcome with boredom, groped in his pockets and produced from one a tangled mess of string, pebbles, chewing gum and penknife, and from the other a toy Morris Minor car and battered mouth-organ. He proceeded to amuse himself by scraping the paint off the Morris Minor with the knife, creating a screeching that set my teeth on edge, and when this palled he began to experiment with the mouth-organ—blow, suck, blow, suck, blow, suck, like the needle stuck on a record of an Organ Voluntary by one of the less imaginative of the 18th century composers.

And, as might have been feared, that did it. Eleanor and Franklin D. lifted their muzzles and emitted a long suffering howl.

"Gee, they're OFF—that's my cuties!" exulted the She-Monster, "Dooow, meeee, soow, doooooow".

The din was indescribable. The baby yelled, the small boy continued to blow, suck, blow, suck, the dogs bayed and the "conductor" doow, meee, soow, doooooed in a cracked soprano. I prayed for the people in the next carriage to pull the communication cord, but apparently nobody had five pounds to scatter, so on we went, on and on, to



Crewe, which, Allah be praised, was journey's end for all my travelling companions.

"Now, honey, I'd adore to have that tape," announced the sadist, "How much d'you want for it?"

"Take it," I said grimly, "For nothing."

"Gee, now that's just too generous of you. You British are the *nice*st people. Say, look, you take these, then—no, don't say a thing, I absolutely insist. Gee, my ole man will just love this tape".

So babbling, as a reward for my agonies she thrust into my hand four packets of Lucky Strike cigarettes. I thanked her, and watched dully as she and the anaemic woman disembarked with their assorted livestock. Then I sat back and laughed with the hysterical abandon of all non-smokers at moments like this.

#### MANCHESTER TAPE STORE

Good news for Tape Recordists, R. B. Tapes Co. Ltd., have opened a swish new branch in Manchester at 89/91, Great Ancoats St., Manchester, 4., where enthusiasts can see and hear any of the wide range of Tape Recorders stocked by them.

# The Sign of Good Tape!



Wherever you see this poster you can be sure to buy Emitape—the World's finest recording tape, preferred by professionals and amateurs alike.

## Emitape

*...and remember—*

The **B.B.C.** use Emitape  
**9** times out of **10!**

**"44"** Popular (Acetate)

**"88"** General Purpose

**"99"** Long Play, giving  
50% increased  
playing time

**"100"** Double Play

**EMI SALES & SERVICE LTD.** (Recording Materials Division) HAYES • MIDDLESEX • Telephone: SOUthall 2468



## THE THIRD NATIONAL TAPE RECORDING COURSE

NEARLY SIXTY PUPILS attended the third National Tape Recording Course held at the Rose Bruford College of Speech and Drama, at Lamorbey Park, in Kent. They came from many parts of the country to learn something of the technical mysteries of the tape recorder and the finer points of recording, programme building, studio operation, editing, in fact everything that goes with tape recording as it should be.

Under the guidance of expert instructors, pupils without previous experience were given a non-technical introduction to the tape recorder and gained much practical experience on many different and popular makes of recorders kindly loaned by generous manufacturers. Those pupils who claimed 'some technical knowledge' and previous experience, were schooled in the higher electronics associated with recording and finally, under the supervision of the B.B.C. instructors, all groups completed the remainder of the course which covered the art of programme making and editing. The course also included the production of Musique Concrète and Electronic Music with tuition from Miss Daphne Oram of Oramics Limited. The team who desired knowledge in this new form of music and tape manipulation received considerable practical instruction at Miss Oram's studio at Wrotham.

The dozens of questions put to the instructors, by pupils, showed a high level of interest in tape recording. Many of the pupils were school teachers who will undoubtedly use their newly acquired knowledge of tape recording for educational purposes. Some, on the other hand, had taken this and previous courses merely to gain fresh knowledge and learn new techniques.

The Rose Bruford Course in Tape Recording is invaluable and voted so by all those who have attended. At least four of the pupils on this third course had attended the previous two.

The Course Organizer - Geoffrey Hodson - deserves full credit for the excellent arrangements. Details of any future courses will be announced in this Magazine.

F.C.J.

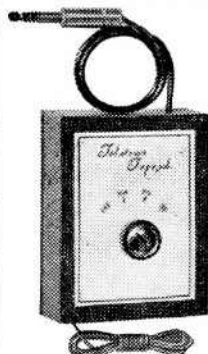
### A STUDENT'S IMPRESSIONS OF THE COURSE.

The introduction to students was well received and had people talking to each other within a short time after the start of the course. **Mr. Jack Singleton's** lecture was in fact an ideal example of the right amount of talk and the right amount of sound illustration. His recorded examples were memorable and entertaining.

*Mr. Jarman indicates an editing point.*



### TELETRON TAPEJAK



The first Transistorised Radio Tuner, specially designed for use with Tape Recorders. Converts a Recorder to a high quality Radio receiver. Direct recording on Tape. Price £5.9.0 (Battery extra). High gain version with in-built Pre-Amplifier, £6.13.9. For use with Gram Amplifiers, etc. Size 5in. x 3½in. x 1½in.

- High Sensitivity
- Self Powered
- Twin tuned circuits
- Pre-setting for MW Programmes
- Fixed tuned for 1500M ...
- Switched programme selector

**THE TELETRON CO. LTD.**  
112b Station Rd., London E.4  
SIL 0836



## **THE EDITING SESSION (PRACTICAL) — I. W. JARMAN**

This was a useful session although a shade long. The recording used was very suitable for editing purposes, but perhaps next time, something a little more exciting?

## **HOW TO GET THE BEST FROM TAPE RECORDING — JOHN BORWICK**

A helpful session. The points he covered about the theory of tape recording were useful both to those new to tape recording and to the more experienced.

## **DESMOND BRISCOE DRAMA LECTURE**

This lecture made students realize the need to understand the intimacy required in sound broadcasting, e.g., talking to the mic as a person; how to indicate changes of time back and forward; not giving the ear more than one sound at a time to cope with.

## **J. GRAHAM JONES LECTURE**

This was interesting and told one how to cope with a limited amount of non-professional equipment. The students were given a number of ideas on a definite approach to the use of recorders, especially in schools. The discussion which followed also brought out a number of good ideas. Mr. Graham Jones also gave a practical lesson in the use of a studio mixer, using three examples: Announcer of music, Quiz Programme, Political Speech. This was particularly useful for the beginner as each student had a chance to produce, mix and act in front of the mic. I would have welcomed more of this during the course if it had been possible.

## **USE OF A MICROPHONE IN A STUDIO — GEOFFREY HODSON**

This was amusing, interesting and helpful. For instance, one learnt the use of three voices at the microphone: calling off, to the person opposite, and undertone.

## **TESTING A TAPE RECORDER — F. C. JUDD**

This was a rather advanced topic for most of the group to which it was given. I would have welcomed the chance for some practical work here.

I heard from the beginners' group that Mr. Judd's talk to them on how a recorder works was very helpful, so perhaps if we had said we were closer to that group . . .

## **ORCHESTRA RECORDING — DAPHNE ORAM**

Much organisation went into this, but some of it was wasted as I was not always certain which microphone was in operation. I would suggest a larger

*The studio control room.*



*Mr. Judd explains some basic principles.*

diagram of the microphone locations, and an amplifier for Miss Oram, to improve what is one of the most informative parts of the course.

## **STUDIO PRODUCTION OF PUNCH AND JUDY DESMOND BRISCOE**

Great fun and much learnt. My only criticism is that too few students were able to operate the control panel and mixer.

## **O.B. (OUTSIDE BROADCASTS)**

Groups of four or five were formed for this and sent off to make their own choice of subject and then do an O.B. on it. The subjects chosen were as varied as the results: "Bob a Job", "Saturday Morning Cinema", "Free in Woolwich", "Robberies in Sidcup", "Road Accidents", "Skit on Recording", "Impressions of Railwaymen", etc. These were later criticised and gallantly defended.

To sum up, I found this to be an excellent and invigorating course, at which I learnt much more in the time than I would have thought possible.

**L.S.H.**

## **TUTORIAL STAFF**

**Director — Geoffrey Hodson** — Tutor and Special Courses Organiser, The Rose Bruford Training College.

**Technical Operations Manager — J. Graham Jones** — Schoolmaster, Temple Secondary School, Strood, Kent.

## **Tutors**

**John Borwick** — Technical Editor, "The Tape Recorder", formerly Instructor in Studio Operations, B.B.C.

**Desmond Briscoe** — Senior Studio Manager, Radiophonic Workshop, B.B.C.

**Richard Burwood** — Assistant, Outside Broadcasts, B.B.C.

**I. W. Jarman** — Instructor in Editing, B.B.C. Engineering Division, author of "How to splice Tape".

**F. C. Judd** — Technical Editor and Adviser to "Amateur Tape Recording". Electronics Engineer.

**Daphne Oram** — Director of Oramics Ltd. (Electronic Effects); formerly B.B.C. Studio Manager (Music).

**Jack Singleton** — Producer, Talks Department, B.B.C.



*Charles Cockshott (Chairman of "B" TRAC) describes some of the features of the Norfield Consolette to members. This recorder is made by Norfield Electronics, a Birmingham firm.*



*Brian Elliot (Club Chairboy) shows the ladies of "B" TRAC "how it works".*

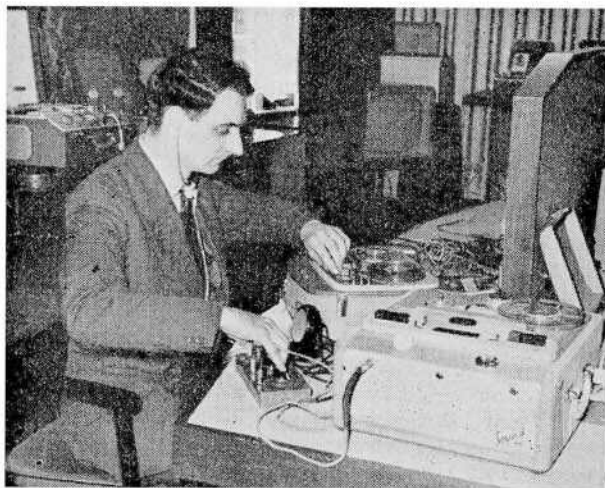
## CLUB PICTORIAL

by Albert Greenway

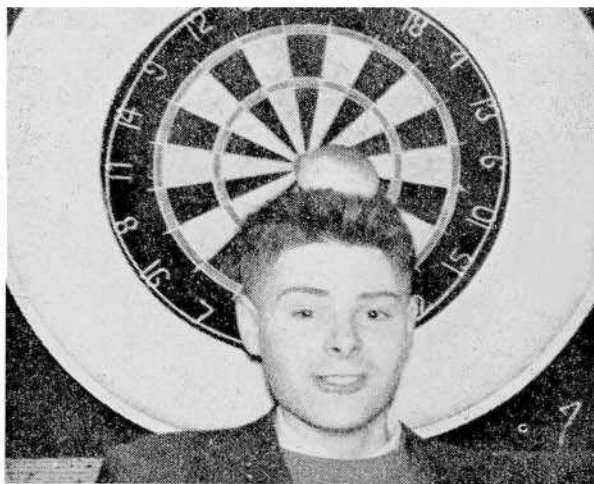


*South Manchester Tape Recording Club hold a monthly competition to find the "Tape of the Month". A silver mike is given to the member who submits the best five minutes on tape. The tape then goes into the Club library.*

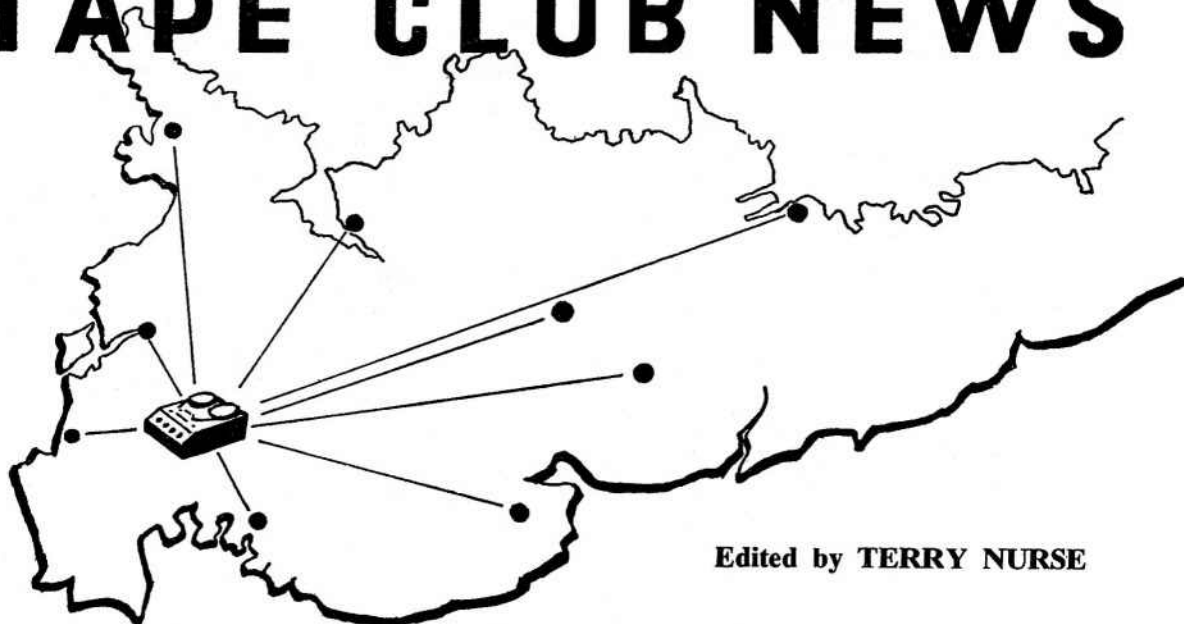
*Godfrey Machen (Chairman of the York Tape Recording Society) operates the controls during the Club's first Exhibition and Demonstration, held in conjunction with Messrs. Cussans and Lights at their showrooms in King's Square, York.*



*William Tell or Aunt Sally? Our Club News Editor, Terry Nurse, faces his critics fearlessly.*



# TAPE CLUB NEWS



Edited by **TERRY NURSE**

## ANNOUNCEMENT

Will Club Secretaries continue to send news to :—

**TERRY NURSE,**

161 Stuart's Road,  
Birmingham 33,  
not later than the 26th of the month. Send plenty  
of news in because **THIS IS YOUR JOURNAL**.  
Interesting photographs are also invited.

## WHAT DOES THE FUTURE HOLD?

Hazarding a guess at what tape recording is going to be like in 50 years time is a thing I wouldn't like doing myself. But Michael Cybulnik was brave enough to address Leicester Tape Recording and Hi-Fi Club on this subject. He said that newspapers would disappear, and their place would be taken by "tape-newspapers". News of international importance would be beamed to an artificial satellite which would tape the message, and later re-broadcast it, as it circled the globe, to tiny receivers worn on the wrist of every citizen of the world.

I suppose Mr. Cybulnik's prophesy isn't quite as wild as it first seems when you think about it, but I didn't find any "wrist radios" at *this* year's Audio Fair, did you? Still, we've still got 49 years to go for the visions to come true. . . .

Also making some prophesies, though a little more down to earth in both senses, were members of the Coventry Tape Recording Club. After a demonstration of fifteen different recorders, and a talk by Mr. J. C. Worman, of R.E.S. (Coventry) Ltd., they formed the impression that the machines of the future will be two- or three-speed twin-track stereo or four-track



monaural models, with monitoring, superimposing, and mixing facilities as essential features.

Machines demonstrated, which helped them in this decision, were the Harting Stereo, Korting 4-track, Philips Stereo and several others. You will note that these are all continental-made models, and it is perhaps sad to reflect that they attracted by far the most attention from members. Mr. Worman remarked that British manufacturers are lagging behind their Continental counterparts in development and design.

## "CONVENTIONAL" CLUBS

Moves are afoot for a convention of tape recording clubs in the Midlands area, to further the local interest in tape recording and High Fidelity reproduction.

Later on, it is hoped to run this in conjunction with a *Midlands Audio Fair* and an approach has been made to the Secretary of Audio Fairs Ltd., suggesting a possible venue.

Meanwhile, will all Club Secretaries in the Midlands please contact me if they are interested in taking part. I shall then pass on the information to those concerned, and further details will be given in this magazine later.

## A TAPE TOPIC

We regret to hear that the American Tapespondence Club, World Tape Pals, has incurred a debt of \$3,000 in publishing their periodical *TAPE TOPICS*. As many readers will know, World Tape Pals were one of the first large-scale tapesponding organisations to be formed.

## NAILING UP EIDERDOWNS

Swindon Tape Recording Club recently visited the B.B.C. Bristol Studios where they saw how the expert





technicians make their recordings. They were lucky enough to go round the TV studios and the echo-damping rooms. "After seeing those echo-damping studios I can see members nailing their eiderdowns on to the ceiling to get an echo-proof recording room", commented Secretary K. E. Trenerry.

This club has now formed a practical group, which probably learned some useful gen from the B.B.C. visit. They are also learning from the articles our Technical Editor, F. C. Judd, is contributing to A.T.R., and they intend to construct some of the equipment shown.

#### SILVER BAND . . . IN STEREO



Activities of the six-month-old Harrogate Tape Recording Club have included recording sessions with two local groups of musicians of a widely different type. The first was with the "Crag Rats", which must be one of the few skiffle groups still in existence. The second was with the Knaresborough Silver Band, and it was recorded in stereo on a Grundig TK 60.

Several of the members are keen photographers, and they have compiled a tape-slide show which they would like to exchange with other clubs in return for a similarly produced show. Any club interested, please contact Secretary D. Bryers, 2 Park Side, Follifoot, Harrogate.

The club has fifteen members, and aims to increase this figure. A publicity campaign has been running for some while now, and it includes write-ups in the local press, as well as the distribution of several hundred printed leaflets through tape dealers. A specimen sent to me is a two-colour letterpress Crown 8vo sheet, which, in big, bold, letters proclaims that "Meetings are held every Wednesday at 7.30 p.m. in the Home Guard Club, 4 Avenue Road, Harrogate, . . . so now you know."

#### PRINTED CIRCUITS

A printing works would seem just about the last place in which to find a tape recording club, but there is a certain printing works where you will find sixteen tape recording enthusiasts with a wide variety of recorders. It's Watson & Viney Ltd., of Aylesbury, Buckinghamshire, and the tape club is part of the firm's social club.

As there is no other club in the town, the kind-hearted printers have decided to allow other tape enthusiasts to join in, so you don't have to have "ink in your veins" to take part.

They are anxious to start a service for the three hospitals in the locality and any assistance is welcome. The Secretary is L. W. Powell, 31 The Avenue, Princes Risborough, Bucks.

#### IT'S MAGIC



Members of the Birmingham Club saw the unique film "The Magic Tape" at a recent meeting. Those of you who visited the Audio Fair will know that it deals with many facets of tape recording, including tape as a mechanical ear, mathematician, talking engineer, and a "tool that can help change the world". The history

of tape from the B.A.S.E. angle was also given, via slides with taped commentary. It included some views of the B.A.S.F. factory in Germany which employs 45,000 people and covers an area 4½ miles by 1½ miles. Quite a factory!

A hilarious evening resulted when at another meeting Dennis Brown, the Secretary, produced the "B" TRAC Tall Story Collection No. 1. His definition of a tall story is a "whole pack of lies made to appear as convincingly true as possible". The collection included contributions by Alan Crook, who told of an amusing experience which happened to him when he was young; Barry Stephens, who produced a space-fiction-themed tape; and Reg Smith, who brought out a thriller from his "murder bag".

#### MRS. DOLL'S DIARY



Two newly-joined members of the Bournemouth Club, Mr. & Mrs. K. V. Ward, have made a tape burlesque of "Mrs. Dale's Diary", which they played at the last meeting. Their version of this popular radio programme was made at the Bournemouth Fire Service, where Mr. Ward

is employed, and the rest of the Force were only too happy to assist in the recording. Entitled "Mrs. Doll's Diary" it relates the daily happenings of a fireman's wife.

This club has had a visit from Mr. L. V. Saunders, of E.M.I.'s recording division, who, by the looks of it, is yet another "round-robin demonstrator". I feel we must hand it to these V.I.P.s from the industry who are willing to give up so much precious time in order to provide enjoyment and instruction for tape clubs. A pat on the back to you all.

#### MESSAGE SERVICE PROGRESS



The message service started by the Brighton Tape Recording Club, in which other clubs were invited to participate, has stirred considerable interest.

The original letter was sent to seventy clubs, established and in formation, using the "Directory of Clubs" published in this magazine.

The response has been such that seventeen follow-up tapes have been sent to clubs anxious to take part. "A very gratifying result", said Chairman Bert Guernsey.

Because of the success of the venture, Mr. Guernsey has been given the position of personally supervising this section of the club's activities. All correspondence relating to the service should therefore be sent direct to him at 44 Hogarth Road, Hove.

#### SINGING IN CHIPMUNK STYLE



Seventeen people were present at a meeting of the West Herts Tape Recording Society, when J. D. Crainger demonstrated several different types of microphones.

A very competent pianist did an awe-inspiring job with a piano that had seen better days, but notwithstanding this, every rumble and bang the dilapidated

instrument made, was reproduced in too true fidelity! So it was not really surprising that the crystal microphone gave the *best* results..

Mr. Crainger also demonstrated how to repair a broken tape using a Bib splicer.

At the following meeting, held in Watford, members carried out the experiment with the "Chipmunk Effect", as described in our February editorial. They also had a demonstration of dubbing from two recorders, using what I call the "double-dubber" method (perhaps you have your own pet name). A tape made at  $3\frac{1}{2}$  ips is transferred with *both* recorders revolving the spools at—say— $7\frac{1}{2}$  ips, so that the resulting tape is still at  $3\frac{1}{2}$  ips playing speed, but has taken only half as long to dub!

Mr. Crainger has gathered a lot of recorded material for the use of Blind Clubs in Watford and Rickmansworth. Already he has broadcast one programme to them, and he is now preparing a second.

#### **MONTH OF PROGRESS**

April was certainly this for the Friern Barnet Club, with seven new members joining. In order to cater for further expansion, new premises have been found, and meetings are now to be held every fortnight. A full programme for the coming months has been planned.

A tape has been received from the new club at Northallerton, and members are working on a reply. Tapes from other clubs are also welcome, and a tape library is soon to be formed. It will have a technical data section.

Prospective members can phone ENTERprise 7972 for details.

#### **NORTHALLERTON AFFILIATE**

The B.R.C. extend a cordial welcome to the Northallerton Tape Recording Club, the latest club to affiliate, which has twenty-five members, and meets once a fortnight. Fifteen members were present at the last meeting when a number of short stories and musical items were brought along by members.

Clubrooms have been let by the Chairman free of charge, above his photographic business.

A hospital service is contemplated, and the club would like to co-operate with other clubs regarding message, relay, etc.

On May 18th, the club was scheduled to record "Dial  $3\frac{1}{2}$ ,  $3\frac{1}{2}$ ,  $3\frac{1}{2}$ " the play published in our February edition.

#### **MORE TAPE FOR W.W. CLUB HOSPITAL SERVICE**



The tape supply of the West Wales Club is to be replenished because practically all the tapes it has are full. Full, in fact, of over ten hours of material which can be provided for any of the six hospitals in the area. The programmes are kept on file and replayed after a short interval

to the same hospital. This can be done because the patients in these particular hospitals are not long-term cases for the most part. The programmes are of a highly regional flavour and mainly in Welsh. The decision to replenish the supply of tapes was made at the club's A.G.M. held recently, when M. D. Gareth Jenkins (Secretary), Tom Evans (Chairman), and J. W. Nelson (Treasurer) were re-elected for second term of office.

JUNE, 1960

#### **CELESTIAL SOUND EFFECTS**

A tape has been received by Coventry Club, from the San Francisco tape recording club. It includes literally scores of sound effects, and some of these are weird space noises, synthesised for the club by G.V.A. Radio. They are to be used in a play the club is producing.

The San Francisco Club has promised to send some more effects over, providing Coventry Club can supply in return the "sounds heard in a typical English pub—including cheeky barmaid's chatter". Coventry Club will do their best to oblige!

Henry Hopfinger continues to make more tapes for Coventry Club's Tape Library, and this is increasing considerably as a result of his efforts. His last three tapes have been an interview with a team of Soviet architects and engineers visiting the city, an interview with some Japanese visitors, and a recording made with a Hungarian-born B.B.C. producer.

#### **RECENT DEMONSTRATIONS**

Messrs. Pinder & Pearce of Pages Ltd., demonstrated the TK 60, SP4, Ferrograph, Fi-Cord and Clarion, at the Doncaster Club and afterwards, both ably answered questions about them.

Mr. L. W. Saunders of EMI talked to the Swindon Tape Club about developments in tape manufacturers at another meeting. One useful tip was that tape is best stored for long periods with the glossy side facing inwards on the reel.

Another club having had a recent demonstration is the Weymouth one. Mr. Ralph Gough, the General Manager of Fi-Cord, demonstrated his firm's products to members at a recent meeting. Afterwards one of the members, Mr. Bains, presented a tape-slide show received from the U.S.A., and another featuring local scenes.

The Leicester Club had a demonstration of an ex-W.D. throat microphone given by Mr. John Moule. He said its uses were very limited. After this demonstration Colin Frost asked members to add a few words to two of his tape pals in America.

The Ipswich Club had a demonstration of Lustraphone Microphones given by Mr. Pontzen, the Technical Manager of Lustraphone, and another of the new Philips recorder was given at an earlier meeting by Mr. Ivan Brown. Mr. Brown also brought along with him a home-built loudspeaker cabinet which housed a HF 12in. loudspeaker and tweeter. This produced very good results when tapes were fed through it at this demonstration.

Mr. John O. Bannister, the Rugby Society's President, and Manager of Benn Radio Ltd., gave a demonstration of tape recorders at the Lawrence Sherriff School, at the request of the Teachers' Association.

#### **THAT ROUND ROBIN CLUB**

In our last edition we reported that a club had been formed for Round-Robin enthusiasts. The people responsible, two members of the B.R.C., one living in Reading and the other in Burley & Wharfedale, nr. Ilkley, Yorks., have now given me some further details about how the club will be run.

A 7in. double play tape will be distributed between each group of twenty-four members, and each member will have ten minutes of the tape (portions

will be marked with Metro-Tabs) in which to record anything of general interest, e.g. news of their town, articles about tape recording, general interest talks and so on. 5in. tapes will also be used and these will be distributed between sets of twelve members. The 7in. tapes will be despatched every six months, and the 5in. tapes every three or four months.

On one side of both size spools there will be a short message given by the local representative. This will contain general club news from his area.

Members will be able to keep the tapes for a week and must then send them on to the next in the link. At a later date it is hoped to make possible the interchange of tapes between the various sets of twenty-four people, thus bringing to members tapespondence-contact with as many people as possible.

It is also hoped that some members will add small messages from overseas tapefriends they may have as a result of their normal tapespondence.

I am sure that the Round Robin Club will be of interest to all who enjoy this form of tapesponding, and those wishing to join should contact their local representative.

If you live in Southern England this is R. M. Stimpson, 769 Oxford Road, Reading, Berks. If you live anywhere else the man to contact is A. F. Jefferson, 60 Langford Road, Burley and Wharfedale, nr. Ilkley, Yorkshire.

#### AROUND THE WORLD

"A free trip round the world in less than two hours"—that was what the members of the Warwick and Leamington Amateur Tape Recording Society enjoyed at a recent meeting.

Organizer of the trip was Mr. Brian Race, Secretary of the Society. He doesn't travel by the conventional ship, train or aeroplane, but by tape recorder, camera and slide projector. These are the only vehicles he uses.

Mr. Race transcended all barriers of time, as well as those of distance, and first took his fellow travellers to Sweden for Christmas. In the New Year they went to Norway and on to Canada, and then Hawaii.

Native drum rolls brought the audience across the oceans to Tanganyika and Dar-es-Salaam, where Frank Weston, Governor of H.M. Prison (a friend of Geoffrey Collins, a young teenage Society member), told of life in this part of Africa. Returning to England once more, the evening closed with colour slides of the Society's Annual Dinner and shots of the recently formed Society Tape Drama Group in action at Knowle when they submitted an entry in the National Drama on Tape Competition.

The Society are considering a scheme for taking recordings of events in the Leamington area into the homes of lonely and aged people.

#### TAPE RECORDING SERVICE TO BLIND

Four portable tape recorders kept track of the proceedings at a meeting of Ilford and District Tape Recording Society in the committee room of Ilford Pioneer Supermarket on Friday.

Sixteen members listened to an effective demonstration of stereophonic recording given by chairman Mr. Percival Ager, on a Brenell recorder.

They also heard a sample recording of an entertainment programme produced specially for hospital

patients by Mr. Jimmy Hunter, of "Amateur Tape Recording". Stanley Unwin, noted exponent of gobbledegook, and amateur artistes regularly give their services to make these recordings.

Mr. Hunter also described how he makes recorded reviews of each issue of this magazine which are issued to the blind and are much appreciated. Some of them go as far as the United States. He said that, in response to special requests, he mentions the advertisements and the colours used on the cover, as well as the editorial contents.

#### STARTING CLUBS

##### URMSTON

The Urmston Tape Recording Club has just got under way and has eight members. Secretary is T. L. Bullock, 30 Kirkstall Road, Urmston, Lancs.

##### DERBY

Mr. R. J. Cartledge wishes to form a club in this area. His address is 40 Balaclava Road, Derby.

##### AYR

A new club may soon be formed in this area, sponsored by Fairbairns Ltd., of 181 High Street, Ayr.

##### CHELtenham & GLOUCESTER

To fill the "orrible void in tape clubs south of Brum", Eric Jones, of 44 Barbridge Road, Hesters Way, Cheltenham, Glos., and Kenneth G. Tomes, 41 Barnwood Road, Gloucester, are forming a club to cover these two areas. Eight people have shown interest so far.

##### ROTHERHAM

A Tape Recording Club has just been formed in Rotherham. People interested in joining should contact Mr. H. G. Swan, 452 Wortley Road, Rotherham.

##### THANET AREA

Anyone in Thanet area wishing to form a Tape Recording Club should contact Mr. P. Foster, 81 Norfolk Road, Cliftonville, Kent.







The Club suggests that in all instances it is advisable to first contact a prospective tapespondent by letter on the following lines:—

I am a member of the B.T.R. Club and I would like to "Tapespond" with you.

I own a X machine and use X in. spools playing at X i.p.s.

My interests are as follows:—

Dear Mr. X,

Yours sincerely,

For ease of reading, particulars of Tapespondents are printed in the following order — name, occupation, address, interests, taste in music, type of machine and area of Tapesponding.

#### SCHOOLS DIVISION

**C. J. BLOUNT** (Sec. of tape Recording Club), Plympton Grammar School, Plympton, Nr. Plymouth. Number of Pupils, 6 Members in 15-18 Age Group. Type of Recorder: "Philips (5in.)" "Collaro" (7in.) Home-Made (7in.) Size of Spool 3in.-7in. Tape Speed 1½, 1¾, 2½, 3½, 6½, 7½, 15 i.p.s. Parts of the World the School wishes to contact: Great Britain.

**JACK HOPKINS**, Cycle Dealer, 1539 Stratford Road, Hall Green, Birmingham 28. Cycling, folk dancing, trad. jazz. Trad. jazz, light classical. Elizabethan, Essex, 3½, 7½, 15. South Africa, U.S.A., Canada, South America, Australia, New Zealand.

**LEO KUITEN**, Advertising Assistant, Zandstraat 10, Eindhoven, Holland. Photography. Modern jazz. Philips-El 3516, up to 7 in.; 1½, 3½, 7½ in. Anywhere, male or female, Dutch or English.

**BRIAN CHANDLER**, Local Govt. Admin. Assistant, 90 Topsham Road, Tooting, London, S.W.17. Youth clubs, trad. jazz, tennis. Pop., trad. jazz, light classics. Elpico TR350, 3 to 7 in.; 3½, 7½, 15 i.p.s. England, America, France (English speaking only), male or female.

**RAYMOND WATSON**, Assistant Transport Manager, 5 Budle Street, Elswick, Newcastle-upon-Tyne 4, England. Theatre and acting (both amateur and prof.), scootering and motoring, films, music, painting, art, photography, etc. Wide taste in music, especially orchestral classics; I don't like jazz or Gilbert and Sullivan. Philips, AG.8108 G., up to 7 in.; 1½, 3½, 7½. Everywhere; would particularly like to hear from Germany, Holland, Denmark, France, etc.

**BETTY WALKER**, Clerk, 9 Outgate Road, Willesden, N.W.10. Driving, photography, 35 mm. and 8 mm. Eydie Gormé fan, pops. and some modern jazz. Ferrograph 4 SN., up to 8½ in.; 3½, 7½. U.K., U.S.A., Canada.

**GEO. F. CLEGG**, Furniture Salesman, 5 Friarage Mt., Northallerton, Yorks. Family affairs, modern cars, rallies. Popular. Philips EL 3515; Any up to 7 in.; 3½. Anywhere.

**DAVID HOWLE**, Schoolboy, age 16, 71 High Street, Talke Pits, Stoke-on-Trent, Staffs. Recording, photography, wireless. Mainly popular. Telefunken KL 35; up to 7 in.; 3½ and 7½. Anywhere abroad.

**Mr. A. HENDERSON**, 30 Randolph Road, Southall, Middlesex. 35mm colour photography, sport (football, etc.) Operatic, light classics, choral and dixieland. Repts R.30. Up to 7 in. 3½, 7½, 15. Mail clerk. U.S.A. and Great Britain also Germany (but only English spoken).

**EDNA HAWKINS** (Miss), London County Council, 62 Petts Wood Road, Orpington, Kent. Travel, languages, theatre, animals. Popular, light classical. Stella ST 450, 7 in.; 1½, 3½, 7½. Anywhere, French-speaking included.

**OLIVE MONCHAR** (Miss), Business (Drapery), 210 Chester Road, Wrexham, North Wales, U.K. Colour photography, music, general topics. Classical, light, opera, ballet. Telefunken 85, any size up to 7 in.; 3½, 7½ i.p.s. Anywhere.

**DERECK A. KING**, Checker, 42 Banyard Road, London, S.E.16. Tape recording, films, musicals, printing. Pop., musicals, light classics, dance (strict tempo). Grundig TK 5, 3 to 5½ in.; 3½. Holland, Norway, Sweden or anywhere, English-speaking only (male or female).

**FREDERICK W. WOOD**, G.P.O. Telephone Engineer, 9 Albury Avenue, Bexley Heath, Kent. Records, tape recording, motor cycling and general interests. Light, classical and opera. Ferrograph, up to 8½ in.; 3½ or 7½. Anywhere, English only spoken.

JEFFREY MAYNARD, Scholar, age 15½, 2 Anfield Court, Anfield Road, Liverpool 4, Lancs. Ballroom dancing, anything scientific. Rock 'n' roll. Pop. Grundig TK 20, up to 5½ in.; 3.75 i.p.s. U.S.A. (but Canada Okay). I would prefer somebody of my own age, but definitely nobody over 19 years of age.

BARRY ARTHUR BENNETT, age 17, Apprentice Welder, 1 Wellington Street, Castle, Northwich, Cheshire. Motor cycling, tape recording. Modern music, pop. music, some types of classics. Philips EL 3527, 5 in.; 3½, 9.5 cm./sec. Any English speaking.

GRAHAM E. BULLOCK, Student, age 15, 48 Percy Road, Wallasey, Cheshire, England. Music, rugby, swimming, art, mathematics, cinema, sea fishing. Any type (excluding heavy classics). Elizabethan Avon, up to 5½ in.; 3½ i.p.s. Any English-speaking country, and "slow" French and German; anyone who has the same interests (male or female).

JOHN BENISTON, Schoolboy, age 16, 60 Vaughan Street, Coalville, Leics. Cinema, youth club activities. Pop. (R.R.), brass and military bands. Gramdeck, 5 in.; 7.5 i.p.s. U.S.A. and Australia.

VICTOR ANDREWS, Clerk, 3 Station Road, Filton, Bristol. Recording, comedy shows and comedians, art, cinema-going, science fiction. Pop., light classical (Gilbert and S.), comedy, country and Western. Walter 101, up to 5 in.; 3½. Britain and any English-speaking country.

DEE HARRIS (Miss), W.R.A.C. Officer, 12 Victoria Mansions, Terminus Road, Eastbourne, Sussex. Travel, theatre, army, people. Songs and music from musical shows. Philips AG 8109, 5 in.; 3½ i.p.s. Great Britain or Colonies.

KEITH RODERIC ADRIAN WARD, Schoolboy, age 14, 6 Cambridge Green, New Eltham, London, S.E.9. Music, photography. Pop. and some classic. Philips EL 3515, up to 7 in.; 3½ i.p.s. U.S.A., Canada.

DONALD SMITH, Clerk, 108 Alexandra Road, Parkstone, Poole, Dorset, England. Photography, travel, records, skating. Light orchestral and instrumental. Grundig TK 5, 5½; 3½. Anywhere, English spoken.

WILLIAM ORDOWSKI, Service Repair Man, 1034 Pine Street, Port Huron, Michigan, U.S.A. Music, bowling. Swing music, 1935 through 1949. VM (Voice of America), 7 in.; 7½ i.p.s. Anywhere (English speaking).

FREDERICK TOMLINSON, Van Driver, 34 Rookery Gardens, St. Mary's Cray, Kent. Aviation, tape-recording. Battle of Britain History. R.G.D. Mk. 107, up to 7 in.; 3½, 7½. Anywhere, English speaking.

SAMUEL WILLIAM FISHER, Bus Conductor, 46 Oldpark Avenue, Oldpark Road, Belfast 14, N. Ireland. Photography, tape-recording. General. ("Sound 444") Stellophone ST 450, any spool up to 7 in.; 1½, 3½, 7½, 15. Anywhere where English is spoken.

DAVID JOHN WESTON, Scholar, age 18, 7 Stoke Hills, Farnham, Surrey, England. Records, stamp-collecting, reading and driving. Classical and light music (not jazz or rock 'n' roll). Elpico, up to 5½ in.; 3½ i.p.s. Any English-speaking country.

LEONARD R. BURCHELL, London County Council Ambulance Driver, 36 Nevitt House, New North Road, London, N.1. Motoring, exchange of customs, particularly ambulance work and Freemasonry. Körting 4-Track Stereo and Sound 777, up to 7 in.; 3½ i.p.s. stereo, 3½, 7½, 15 mono. Australia and New Zealand, U.S.A. and Canada, S. Rhodesia (and pleased to hear from anywhere).

S. W. STEMP, Local Government (Health), former Radar type—technicalities welcomed, 16 Clarence Road, Horsforth, Leeds. Pottery making, sculpture, art, music, people (charm of the speaking voice). Most that is good, especially Latin-American and Continental (authentic, please). Ferrograph and Philips, 3, 5 and 7 in.; 3½, 7½ i.p.s. Anywhere, if it includes Uganda and Kenya.

ALAN EVANS, Student, age 15½, 13 Clapham Road, Anfield, Liverpool 4, Lancs. Reading, tape-recording, cycling, wireless, science. Any except very classical. Saja Export, Mk. 5, Collaro 7 in. max.; 3½, 7½ or 15 i.p.s. Any.

BRIAN SNELLER, none (an invalid, age 19), Ward 13a, Joyce Green Hospital, Dartford, Kent. Modern jazz, technical side of tape recorders, making costume jewellery. Modern jazz. Saba TK 75A, up to 7 in.; 3½, 7½ i.p.s. (have access to 15 i.p.s.). Any English-speaking, but especially U.S.A.

BARRIE TURTON, Office Manager and Dance Band Leader, 49 Allerton Grange Rise, Leeds 17, Yorkshire. Horses, jazz, riding, most sport. Modern jazz, Dixieland, popular (not skiffle or rock). Grundig TK 30 and Telefunken 75-15, up to 7 in.; 7½, 3½, 1½. U.S.A. and India in particular, but anyone with an interest in jazz or horses (however remote) is more than welcome.

J. G. BLYTHE, Clerk, 41 Hyde Way, Welwyn Garden City, Herts. Football. Everything (particularly jazz and blues). Philips AG 8109, 5 in. to 3 in.; 3½. U.K., India, Pakistan, Malaya, English speaking tapes only.

FRANCIS DALVIN, Clerk, 8 Gurney Road, London, E.15. Acting, singing, poetry, composition. Rossini opera, 20th century orchestral, exotic of all sorts. Dulci-Harting/Elizabethan 56, up to 7 in.; 3½ or 7½ i.p.s. Anywhere.

DAVID J. RICHARDSON, Outside Salesman, 84 Westmoor Road, Enfield, Middx. Sailing, horse riding, cars, gadgets, anything interesting. Pop, light (not rock). Regent, 7 in. max.; 1½, 3½ and 7½. Anywhere.

M. WHEELER, Self-employed, 31 Commercial Street, Maesteg, Glamorgan. Cine-recording, business, motoring. Jazz and light music, some opera, ballet. Reflectograph, 3½ to 7 in.; 3½ to 7½. Anywhere.

ELLEN GORDON (Mrs.), Housewife, 6 St. John's Place, Montrose, Scotland. General, people, interior design, furniture and furnishing. All types, especially shows, modern ballad singers. Sound 444, up to 7 in. 3½, 7½ and 15. America, New England (but anywhere that English is spoken).

ROY HASLEHURST, Road Tanker Driver, 4 West Park, Marbury, Northwich, Cheshire. Amateur radio, family, sound effect. Electric guitar and brass band music. Winston Thoroughbred, 7 in.; 3½, 7½, 15 i.p.s. Canada and U.S.A.

BRIAN D. SERCOMBE, Student Mental Nurse (3rd year), 23 George Street, Saltaire, Shipley, Yorks. Missionary, Evangelism, children, comparative religion and tape-recording. General (with preference to Gospel singing), trios, quartets and choirs. Philips EL 3515, up to 7 in.; 3½ i.p.s. Anybody, anywhere.

PHILIP NORTH, Student, age 15, 18 Salisbury Road, Watford, Herts. Tape-recording, travelling, cycling, amateur radio. Modern and traditional jazz, light, rock 'n' roll, popular. Spectone 161, up to 7 in.; 3½, 7½, 15 i.p.s. Any English-speaking country.

DOUGLAS A. W. N. WOOD, Civil Servant (Valuer), 8 Charles Street, Dunfermline, Fife, Scotland. Current affairs, central and local government, education, law, photography. Light or "rock." H.M.V. (D.S.R.I.), 7 in.; 3.75 and 7.5. Anywhere (only English spoken fluently).

Dr. Ing. FRANK H. MARZ, Dr. Ing., Consultant (Horology), 94 Downton Avenue, Streatham Hill, London, S.W.2. English, recording, photography, 8mm. movie, Dixieland music, documentary, etc. Dixie, traditional. Wyndor Viscount, 7 in. and below; 3½, 7½. Anywhere (English, German language).

TOM URQUHART, Cinema Projectionist, 13 Glenogil Terrace, Forfar, Angus, Scotland. Motor cycling, photography, travel. Trad., jazz, pops, guitar, light classical. Walter 101, 5 in. max.; 3½ i.p.s. Anyone, anywhere.

HERBERT H. EXLEY, Officer i/c Buildings and Stores, Trade Centre, Yaba, Lagos, Nigeria. Cars, Hi-Fi, Cine-photography. Most, except "rock" and what may follow. Collaro IV Hybrid, up to 7 in.; 3½, 7½ and 15. Europe (not U.K.), English, French, learning German (but will try anything).

FELIX DENNARD KNELL, Civil Servant, 20 Hawkenbury Way, Lewes, Sussex. Cine-photography, family motoring, general. Varied, mainly opera, light, and some modern. Collaro Tape Transcriber, up to 7 in.; 3½, 7½, 15. Anywhere overseas.

RONALD G. EATON, Merchant Seaman, 99 Gladesmore Road, London, N.15, England. Travel, photography, and general topics. Varied, not heavy classical. Grundig TK 30 and Stuzzi Magnette, up to 7 in.; 7½, 3½. Anywhere. I'm usually away from England for a period of six weeks, so don't be discouraged if your tapes aren't answered promptly.

JOHN SYMONS, Student, age 16½, 38 Oakleigh Avenue, Edgware, Middx. Films, radio and science subjects. Popular, light and some classical. Philips EL 3538, 7 in.; 1½, 3½, 7½. Anywhere.

ERNEST HEPPWORTH, Cacti and Succulent Specialist, "Mira Mar," 133 Ambleside Avenue, Telacombe Cliffs, Sussex. Tropical plants, photography, inventing, etc. General music, but not extreme modern jazz. Wyndor Dauphin and Truvox, up to 7 in.; 3½ and 7½. Anywhere, and England and America especially.

C. E. FREEMAN, Long-distance Driver, 21 Princes Street, off Cowley Road, Oxford. Still photography, amateur acting. Modern, light, piano. Stella, 5 in.; 3½. S. Africa and the Rhodesias.

JOHN HORSLEY DENTON, Printer and Bookseller, Marchmont House, Church Road, Codsall, Wolverhampton. British railway history, writing and broadcasting (documentary and feature). Mainly light classical. Stellaphone, 5 in.; 3½ i.p.s. Great Britain and Germany.

DEREK J. BAUGH, Packer of Electrical Accessories for an Electrical Firm, 48 Hunt Street, Atherton, nr. Manchester, Lancs. Aviation, music, reading (fiction). Opera and light classics, also musical comedy and popular music, excepting rock 'n' roll and skiffle. Philips EL 3527, 5 in.; 3½ i.p.s. I wish to tape-spond with any part of the world except America and Australia (preferably a female tape-spondent). I am 23 years of age.

OA4 G. GRIGG, DM/933657, Royal Navy, 58 Mess, H.M.S. "Adamant," Faslane, c/o G.P.O., London. General, this and that. Popular classics. Elizabethan Escort, up to 7½ in.; 1½, 3½, 7½. Anywhere except British Isles; preferably a young married couple in New Zealand or U.S.A.

JOHN N. DAVIES, Architectural Assistant, 113 Lawton Moor Road, Wythenshawe, Manchester 23. Photography (still), coin collecting, reading (travel), music, Territorial Army. Light classics, show music, cinema music, popular. Telefunken 75K-15 Clarion, 3 in., 5½; 1½ and 3½ i.p.s.; Clarion: 3½ i.p.s. Denmark, America, Australia, New Zealand and Canada (English only).

PATRICK J. CORDIER, Cinema Manager, "Rex" Cinema, London Road, Norbury, London, S.W.16. Physical culture, photography, publicity. Varied with Ella Fitzgerald and Oscar Peterson as top favourites. Grundig TK 20, 5½; 3½. Anywhere (English speaking), especially with persons overseas, willing to exchange magazines.

W. J. MONEY, Packer, 73 Cromwell Road, Stanmore, Winchester. Reading (general), general knowledge and films. Light. Spectone 161, 3 in. to 7 in.; 3½, 7½, 15. Any English-speaking part of the world.

M. J. BIGWOOD, Electrical Fitter, R.A.F., 39 Derwent Road, Whitton, Twickenham, Middlesex. Photography, radio const. All kinds, classical predominant. Vortexion W.V.A. and Simon S.P.2, up to 8½ in.; 3½ and 7½. Anywhere, particularly overseas.

MICHAEL SHAKESPEARE, Maintenance Electrician, age 20, 1 Shepherd Street, Wolverhampton, Staffs. Amateur radio, dancing, swimming. Light classical (piano), dance, jazz, pop. Brenell Mk. 5, 8½ down; 15, 7½, 3½. Anywhere.

ROBERT JACKSON, Builder, 12 Vincent Terrace, Annfield Plain, Co. Durham. Photography, nature study. Evangelical and classical. Walter, 5 in.; 3½ i.p.s. Anywhere.

ROY EVANS, Railway Goods Shunter, 5 Ethel Grove, Netherfield, Nottingham. Tape, records, photography, woodwork, model railways. Modern, progressive jazz, pops., shows, light classical. Philips AG 8167/00, 5 in.; 3½. Anywhere, English spoken.

B. THORPE, Student, age 18, 22 Slater Street, Sutton-in-Ashfield, Notts. Music, astronomy, ancient history, etc. Classical. Philips "Junior," 5 in.; 3½ i.p.s. France, Germany, English-speaking countries.

ROY E. STENTIFORD, Fitter, c/o Sgts. Mess, R.A.F. Colerne, nr. Chippenham, Wiltshire. Sports, radio, records and general. General (not jazz). Grundig TK 5, up to 5½ in.; 3½ i.p.s. Anywhere.



"I can see a Little One coming into your home!  
Your husband is buying a Portable Tape Recorder!"



G. W. STEPHENSON, Gas Fitter, 25 Willow Garth, Newby, Scarborough, Yorks. Making radio equipment. Pops., etc., dance. Collaro, Studio Deck, up to 7 in.; 7½, 3½, 1½. Anywhere.

DOUGLAS R. P. FERRIDAY, Professional Photographer/Manager, 147 Stockton Road, West Hartlepool, Co. Durham. Colour photography, tape-recording and several topics. Popular, all types including light classics. Walter 303 De Luxe, up to 7 in 3 in. pref.); 3½ or 7½. Anywhere—Britain, France.

23243277 Cpl. D. L. CHALLIS R. SIGS, Radio Technician, Royal Signals, 209 Signal Squadron, Cherry Tree Camp, Colchester, Essex. Photography, radio (Hi-Fi); Traditional jazz, pop., musical shows. Wyndor Viscount, up to 7 in.; 3½, 7½, 15. Any English speaking.

IRENE HIPKISS (Miss), Student Medical Laboratory Technician (slave!), age 19, 21 Carew Road, Ealing, W.13. Youth hostelling, all kinds of music, reading, dancing. Jazz, modern and trad., some classical, i.e., "The lot!" Philips AG 1808, 7 in.; 1½, 3½, 7½ i.p.s. Anywhere, but preference for Scandinavia; limited French (very); even less German.

PATRICIA M. JOYCE (Mrs.), Secretary, 14 Lefroy Road, Shepherds Bush, London, W.12, England. General topics, people. Film music, pops., some classics. Brenell, Mark 5, up to 8½ in.; all speeds. Canada, Australia or New Zealand.

DEREK W. YOUNG, Messenger (Insurance), 101 Purley Vale, Purley, Surrey. Cycling, photography, athletics. Most types (excluding ballet or heavy opera). Grundig Cub, 3 in.; 3½ i.p.s. Australia, U.S.A., Canada and New Zealand.

CHRISTOPHER SHAW, Photographer's Apprentice, "The Mount," Potter Hill, Pickering, Yorkshire. Stamps, travel, other foreign interests. All music, except opera. Walter 101, 5 in.; 3½. Any English-speaking person.

## **Bib RECORDING TAPE SPLICER** **FOR EASIER AND ECONOMICAL TAPE EDITING**



Everyone who uses a tape recorder will need this little tool. It is indispensable. P. Wilson, "The Gramophone". Send a stamped, addressed envelope for a helpful leaflet on tape editing.

The easy-to-lift clamps on the new Mark II Bib Recording Tape Splicer are both hinged on the same side of the splicer, making the jointed tapes easy to remove. Precise, rapid tape jointing is ensured, and because you can use all the odd lengths of tape, you soon save the cost of the splicer.

18/6d each (subject)

MULTIGORE SOLDERS LTD.,  
MULTIGORE WORKS, HEMEL HEMPSTEAD, HERTS. TEL: BOXMOOR 3636

## **MAGNEGRAPH**

**TAPE RECORDER HIRE SERVICE**  
**TAPE TO DISC SERVICE**  
**STUDIO RECORDING**  
**MOBILE RECORDING**

write for details:

**THE MAGNEGRAPH RECORDING CO. LTD.**

1 Hanway Place, London, W.1

Telephone: LAngham 2156

SYDNEY G. PYKE, Newsagent, Tobacconist, Confectioner, "Naivasha," Downlands Road, Olivers Battery, Winchester, Hants. 8mm. cine., cars, music (pop.), ways to make money. Pop music, bands, general. Grundig TK.35, 7 in.; 1½, 3½, 7½. Kenya, California, Australia, Canada, New Zealand.

JOHN SCRUTTON, Newsagent, 86 Dereham Road, New Costessey, Norwich, Norfolk. NOR 51J. Speedway and collecting programmes. Classical. Grundig 830/3D, 7 in.; 3½, 7½. Australia, New Zealand, Great Britain, Sweden, Poland, and anywhere speedway is raced.

WILLIAM JAY, Electrical Engineer, 7 Northpark Road, Bradford 9, Yorks. Photography, travel, country walking, mountain climbing, camping, boxing, sound-recording equipment. Classical and modern orchestral. Spectone, 7 in.; 7½ and 3½. North of England, New Zealand (male correspondents).

JACK EVANS, Postman, 73 Faraday Avenue, Quinton, Birmingham 32. Youth clubs, stage entertainment. Dixieland, general (excluding opera). Philips EL 3527, 5 in.; 3½ p.sec. America, Egypt, Europe and British Isles.

ROLAND ARGER, Tree Surgeon, 2420 North West 99 St., Miami, 47, la., U.S.A. Sports, all types of music, own Vespa, motor scooter, photography (35 mm.), colour slides. All types. Britain and Germany, preferably female.

ANTHONY MATHTSTEIN, Optician, c/o C. Clarke Ltd., 33 St. George's Street, Canterbury, Kent. Photography, gardening, golf. General, except skiffle. Ferguson, 5½ in.; 3½. Any, but preferably England.

FREDERICK WILLIAM REW (A.M.I.M.I.), Foreman Motor Engineer, 24 Manston Lane, Crossgates, Leeds 15. Light music (not pops.). Photography, "Do It Yourself." Elizabethan Essex; 3½, 7½; 15. Any.

ROBERT IAN COOKSON, Trainee in Advertising, The Vicarage, Barton, nr. Preston. Printing, body building. Classical, popular. Walter 101, 5 in.; 3½. Anywhere.

L. F. PRIOR, Industrial Chemist, 11a Natley Avenue, East Boldon, Co. Durham. General. Telefunken 85 KL, up to 7 in.; 3½ and 7½. Anywhere.

ARTHUR MAY, Technical Clerk in Tool D.O., 81 Dragon Lane, Newbold Verdon, nr. Leicester. 35mm. colour slides, motoring, layman's science. Swing, trad. jazz, light classics. Philips AG 8108 G, 3 in. for sponding; 3½ or 1½. With light-hearted types anywhere in the universe!

DENYS VAUGHAN ROWLANDS, Company Accountant, 37 Templecombe Way, Morden, Surrey. Music, motoring, family. Popular (Ella Fitzgerald fan). Philips, up to 7 in.; 1½, 3½, 7½. U.K. and U.S.A.

ROGER CLARK, Student, 41 Salisbury Road, North Watford, Herts. Cycling, travelling, tape-recording. Pop., jazz, swing. Spectone 161, up to 7 in.; 3½, 7½, 15 i.p.s. I would like to tape-spond to any European country, with accent on France; English spoken, but would like elementary French; male or female (teenager preferred).

ERIC EASTWOOD, Printer (Compositor, mechanical), 220 Canterbury Avenue, Little Horton, Bradford 5, Yorks. Scouting, literature, hiking and camping. No, not as yet all types of music; long hair to short hair. Philips AG 8108 G, 7 in.; 1½, 3½ and 7½. All parts of Commonwealth, Europe or America.

A. A. CHAPMAN, Postman (Higher Grade), 8 Croft House Court, Richardshaw Lane, Pudsey, Yorks. Cake decoration, amateur dramatics, films. Popular songs, light classics, light opera. Grundig TK.20, 5½; 3½ i.p.s. Any, providing English is spoken.

ROY STROUD, Hotel Clerk, age 18; 48a Battersea Rise, London, S.W.11. Fishing, films, history of jazz. Modern or traditional jazz. Grundig TK.25, 5½ in. or less; 3. The U.S.A.

FRED OGDEN, Railwayman, 111 St. Albans Road, St. Anne's-on-Sea, Lytham, St. Anne's, Lancs., England. Travel, the Bible, Singing, piano, and organ; also Handel's "Messiah." Philips EL 3515, 3 to 7 in.; 3½ i.p.s. Any English-speaking countries.

TOM DIXON, Salesman, P.O. Box 14, Bulawayo, S. Rhodesia (ex Hull, Yorkshire, 1947). Motoring and tape. Modern and pop. Grundig TK 20, 5½ in.; 3½ i.p.s. Anywhere.

PAUL WILLIAM WILSON, Scholar, age 13, 6 Grange Road, Caister-on-Sea, Norfolk, England. Study of tape-recorders and cars. Popular. Grundig TK 20, 4 in.; 3½. Canada, Russia.

A. G. HILL (Mrs.), Wife of Solicitor, De Montfort, Richard Place, Priors Park, Tewkesbury, Glos. Varied, but desire to do others some good—hospitals and the blind uppermost. Varied, but prefer music as MUSIC, not DIN. Philips EL 3527/04, 5 in. (13 cm.). Anywhere where English spoken.

EDWARD PERRY, Chauffeur, 88 King Edward's Road, Hackney, London, E.8. Guitar music, Spanish and S. America, ham radio and football. Flamenco singing, any guitar music. R.G.D. Mk. 103, 7 in.; 1½, 3½, 7½. Spain, Greece, Cyprus (fluent Greek spoken). Any Greek or Cypriot in any country and also young married couples.

WILLIAM IVOR BARKER, Storekeeper, Charge-hand, 10 Greenfield Place, Ryton, Co. Durham. Toc H, drama club, scooters, sound effects. All music. Grundig, 7 in.; 7½ or 3½. Anywhere. Anyone with Toc H interests.

F. H. THOMAS, Crown Servant, 109 Raffles Road, Birkenhead, Cheshire. Talking, people, music, reading, woodwork. "Traditional" jazz, folk, classical (especially operatic). Spectone 161, up to 7 in.; 3½, 7½, 15. Anywhere (can manage French and some Italian, but would prefer English to start with). It probably is unnecessary to say so, but I have absolutely no objection to so-called "coloured" people!

JOHN STYLES, Car Sprayer (motor body repairs), 235 Eltham Palace Road, London, S.E.9. Hi-Fi, records, films, motoring. Shows—South Pacific, etc., dance (Ray Coniff, Frank Sinatra, etc.). Sonomag (Collaro tape deck), 7 in.; 3½, 7½, 15. Any English-speaking country.

BRIAN DAVIES, Local Government Officer, 36 Hollyfield, Gresford, Wrexham, Denbighshire. Academic and scientific. Classical. Philips AG 8108 G, up to 7 in.; 1½, 3½, 7. France, Holland and Belgium. I have a working knowledge of ESPERANTO.

JOHN PETER FRENCH, Car Sprayer, 3 Curzon Road, Ealing, W.5, London. Cycling, opera, films, etc. Classical and modern. Regentone, 7 in.; 1½, 3½, 7½. All over.

J. H. BECK, T.V. Salesman, 127 Stanmore Lane, Stanmore, Winchester, Hants. Photography. Pop., musical shows, little jazz, light music. Repts R 30, 7 in.; 3½, 7½, 15. Australia, U.S.A., Africa.

PETER MIDDLETON, Civil Servant, 102 Brondesbury Park, London, N.W.2. Music, collecting records, scootering, dancing, reading, concerts, amateur dramatics, sport, films. Most classical (ex chamber), opera, best of popular, trad. jazz and some modern jazz. Brenell Three Star, up to 7 in.; 1½, 3½, 7½. New Zealand, Australia, U.S.A., Europe preferred, but anywhere where English is spoken.

ALAN JOHN VERE, Railway Booking Clerk, age 18, 119 Rutland Avenue, High Wycombe, Bucks. Colour slide photography, motor cycling, books (fact), collecting records. Everything (rock to classical). Fidelity Argyll, 5½ in.; 3½ i.p.s. Great Britain

or France (with view to improving my rather limited French).

JOHN LEWIS, Assistant (Mac Fisheries), age 19, 57 Dudley Street, Hr. Broughton, Salford 7, Lancs. Youth work (general). All (pop. mainly). Philips EL 3527, 5 in.; 3½ i.p.s. Any English-speaking person, anywhere.

A. McCALLUM, Machine Ruler, 120 Cardross Street, Glasgow, E.1. Football, tape-recording, model railways. Any kind except classical. Grundig TK 25, 5½; 3½, 1½. Anywhere; just send tape, all tapes answered.

RUSSELL E. WILLIAMS, Commercial Traveller (building industry), "Coombe House," 16 St. George's Crescent, Torquay, S. Devon. Evangelical, religious (Baptist), cycling, 9.5 cine photography, reading, Sunday school work and choir. Mainly light (some jazz, but some "highbrow"), religious music too. Philips Recordergram Major, 5 in.; 3½, 1½. Any English speaking.

JOHN CLOWES, Scholar, age 16, 46 Balmoral Dr., Timperley, Cheshire. Cycling, stamps, geography. Some classics, traditional jazz, pops. Grundig TK 20 5½; 3½ i.p.s. France, Australasia, N. America, Canada.

ANTHONY LOCKER, Engineering Apprentice, age 18, 47 Brackens Lane, Alvaston, Derby. Photography, cars, Hi-Fi. Modern jazz, rock, not too highbrow classics. E.A.P. Princess, up to 7 in.; 7½, 3½, 1½ i.p.s. Scandinavia, U.S.A. (preferably a girl tape-sponder).

RAYMOND CROFTS, Salesman (Radio and Television), age 21, 447 Burncross Road, Chapeltown, nr. Sheffield, Yorkshire. Photography. Do it yourself, fishing, sport. Classical and all other types of music. Spectone 161, up to 7 in.; 1½, 3½, 7½, 15 i.p.s. U.S.A. (California), Canada, Australia or anywhere English spoken.



**ALLAN WARBURTON**, Seed Merchants' Representative, 10 Town Close, East Finch, Kings Lynn, Norfolk. Music, plays accordion, piano, organ, hospital broadcasting. All types of music, so long as it is melodic; mood music; piano solo. Grundig TK 830/3D, 7 in.; 3½ and 7½. Any part. Other interests: radio, television, motoring, social and welfare work; have run several dance bands; broadcast a few times.

**MALCOLM FRY**, Engineering Student, age 18, 13 Race Hill, Launceston, Cornwall. Motor cycling, aero modelling. Everything from pops. to classical, but not jazz. Walter 303, 5 in.; 3½ i.p.s. Anywhere, but preferably Germany of West Europe.

**A. J. JEEVES**, Laboratory Worker, age 18, 11 Twelve Aires, Welwyn Garden City, Herts. Collecting Nazi relics, colour photography and travel; general interest. Regentone RT/50, 7 in.; 1½, 3½, 7½. Sweden, U.S.A., Gt. Britain, Central Europe, Australia.

**EDWIN W. CARTLIDGE**, Interior Decorator (also Paint and Wallpaper Retailer), 367 Blurton Road, Blurton, Stoke-on-Trent, Staffs., England. Gardening (including greenhouse work), recording and motoring. Light classical, operetta, stage productions. Stella ST 450 and Bantbox, 3 in. to 7 in.; 1½, 3½, 7½. Anywhere (in English language).

**NEVILLE FREEMANTLE**, Sales Representative, 22a East Avenue, Forestville, Adelaide, S. Australia. 35mm. colour photography, music. Light classic. Philips (Australia model ER 1500 A), 7 in.; 1½, 3½, 7½. England, Wales, Canada.

**DENNIS F. RICHE**, Publican, 25 Netherfield Road

South, Liverpool 5. Music, tape-recording. Light and dance. Philips AG 8106, 5½; 1½ and 3½. Anywhere, particularly New Zealand.

**ROY WILLIAMS**, Industrial Chemist, 63 Long Lane, Orford, Warrington, Lancs. Reading and car mechanics. Light and popular. Saja M 40, 5 in.; 3½. U.S. or Canada.

**RONALD LESLIE MAIDEN**, Publishing Company Director, 66 Midhurst Road, London, W.13. Tape-recording, travel, books, motoring. Classical, traditional jazz, some "pop." (i.e., Frank Sinatra, Ella Fitzgerald, Peggy Lee). Grundig TK 55, up to 7 in.; 1½, 3½, 7½. Anyone anywhere who speaks English, but preferably outside the U.K.

**PETER JOHN BENNETT**, L.-C. in H.M. Regular Army, Assaye M.Q., Blk. F., No. 13, Colchester, Essex. Model making, tape-recording, photography. Country, Western, rock 'n' roll (instrumental). Grundig TK 20, Twin Track, 5½ in.; 3½ i.p.s. America or Canada.

**RICHARD MAZINKE**, Quantity Surveyor, 90a London Road, Bromley, Kent. General, dancing and model railways. Anything except jazz, rock 'n' roll and heavy classical. Carol TR 1, 5½ in.; 3½ i.p.s. Anywhere; English spoken only.

**S. W. SHARLAND**, Chef, 46 Pennsylvania Road, Exeter, Devon. Photography, T.V., travel. Classical popular, rock 'n' roll. Sound 444, 3, 5 and 7 in.; 3½, 7½. Anywhere.

**EDWARD SMITH**, Motor Engineer, 22 Aberfeldy Street, Dennistoun, Glasgow, E.I., Scotland. Photography and travel. Popular and classical. Grundig TK 20, 5½ in.; 3½ i.p.s. Anywhere.

**CLIFFORD LOWE**, R.A.F., 7 Clwrd Avenue, Rhuddlan, nr. Rhyl, Flint., N. Wales. "Pop." music, tape-recording. Popular and military music, and music from shows. Grundig TK 20, 5½; 3½. Britain, U.S.A., Canada, New Zealand.

**REX PARKINSON**, Motor Mechanic, 65 Willingham Road, Market Rasen, Lincs. Tape-recording, current events, films. Show music, pops. (not rock 'n' roll), organ (Thurston). Telefunken KL 65 S, 5 in.; 3½ i.p.s. and 1½. Canada, Holland, Norway, Australia.

**JONATHAN CALVERT**, Scholar at Public School, age 16½, 22 Carwell Avenue, Mumbles, Swansea. Shooting, canoeing, swimming, cycling, cine (8mm.). All except classical and really hot jazz. Walter 101, 5 in.; 3½ i.p.s. Anywhere.

**R. J. REES**, Electrical Engineer, 9a Grange Road, Ramsgate, Kent. Radio, T.V., Electronics. Pop., folk songs, Western. Grundig TK 25, up to 5½ in.; 1½ or 3½. U.S.A., Commonwealth, especially Australia.

**BERNARD OWEN**, Process Engraver, 21 Bideford Road, Offerton, Stockport, Cheshire. Football, music. Popular, semi-classical, show music, trad. jazz. Grundig TK 20, up to 5½ in.; 3½ i.p.s. Canada or any English-speaking nation.

**PETE ROGERS** (Cpl.), Regular R.A.F., Corporals' Mess, R.A.F., Water Beach, Cambridge. General (not highbrow), tape-sponding (secretary, R.A.F. T.R.S.). Pops., rock, classical, traditional jazz. Philips AG 8108 G, 7 in.; 1½, 3½, 7½. Anywhere, anyone.

**BRIAN HYDE**, Composer, 4 Windsor Flats, Australian Avenue, Salisbury, Wilts. Photography, tropical aquaria, natural history. Jazz (trad. and modern), popular classical. Philips (dual track), up to 7 in.; 3½ i.p.s. New Zealand, U.S.A., Australia, Great Britain.

**COLIN EDWIN MARTIN**, Civil Servant, 15 Shipcote Terrace, Gateshead, 8, Co. Durham. Tape-recording, theatrical sound effects, model railways, cacti, amateur dramatics (stage work). All. Grundig TK 5, 5½ in.; Ficord, 3½ in.; Grundig 3½, Ficord 1½, 7½. Any English-speaking person who has, or can gain access to a recorder.

## UNIQUE RADIO of GOODMAYES

The Essex Sound Engineers have a new showroom at 6 The Facade High Road, Goodmayes, and invite you to inspect their stocks of Tape Recorders and Hi-Fi equipments.

Demonstrations enthusiastically given. H.P. Terms to suit you.

The Staff are only too pleased to give advice on the most suitable Recorder for you or how to obtain the best results from your machine.

All leading makes and accessories stocked

Vortexion Specialists

Grundig and Walter Service Agents

**Remember UNIQUE RADIO**

The Facade, High Road, Goodmayes, Essex.

Telephone: Seven Kings 8277

Members R.T.R.A. — A.P.A.E.

## DOUBLE PLAY TAPE

Return of Post Service All post free

**B.A.S.F.** 300ft. (3") 14/-; 600ft. (4") 25/-; 1,200ft. (5") 42/-; 1,600ft. (5½") 52/6; 2,400ft. (7") 77/6.

**MSS.** 300ft. (3") 14/-; 1,200ft. (5") 45/-; 2,400ft. (7") 80/-.

**EMITAPE** 100. 100/3N 400ft. (3½") 17/-; 100/12H 1,200ft. (5") 45/-; 100/24H 2,400ft. (7") 80/-.

**SCOTCH BOY** 200. 400ft. (3½") 17/-; 1,200ft. (5") 45/-; 2,400ft. (7") 80/-.

**TELEFUNKEN.** 1,200ft. (5") in plastic container, 40/-; 1,800ft. (5½") in plastic container, 50/-; 2,400ft. (7") 75/-.

Full list of Standard and L.P. Tapes and accessories available free.

**WATTS RADIO (Mail Order) Ltd.**

54 CHURCH STREET, WEYBRIDGE, SURREY

Closed for Annual Holidays, August 6th — 20th

NOTE.—Post orders only to this address



H. D. AINGER, Chartered Accountant, 6 Learmonth Gardens, Edinburgh, 4. All sports, golf, col. photos, Hi-Fi. All ex jazz, rock 'n' roll and discant. Gramdeck, any to 7 in.; 3½ and 7½ i.p.s. Anywhere.

JOHN C. BLUETT, Senior Sales Representative (Electricity Board), 209 Handley Road, New Whittington, Chesterfield, Derbyshire. Photography, travel, customs, books, sport. Light, popular, some jazz (no extremes). Fidelity "Argyll," up to 5½; 3½ i.p.s. U.S.A. and Australia mainly, but any with similar interests.

J. BRUCE A. BRAIDWOOD, Typist with Aircraft Firm, Flat 20, New Boughton, Bickley Park Road, Bickley, Kent, England. First-aid and home nursing, fire fighting techniques and appliances, local history, organ music, aircraft and space flight, national topical happenings (sporting, etc.), rugby, hockey, oil painting and drawing (sketching), pets, music (as shown below). Classical, ballet, folk, military, national. Philips AG 8108 G, 7 in., but will take all sizes up to 7 in.; 1½, 3½, 7½ i.p.s. International (English-speaking), but preference for following countries: any Commonwealth, U.S.A., Scandinavian, Latin America and Spain.

JOHN A. BERRY, Dept. Manager, 65 Vaughan Road, West Harrow, Middlesex. Dancing and good dance music and orchestras. Big band, mood music and vocal groups; also interested in friendly discussions. Grundig TK 20, 5½ in.; 3½ only. Anywhere in England.

JOHN PARR and MICHAEL RILEY, Electrical Engineer and Electrician, age 16½, 73 Ashampstead Road, Southcote Estate, Reading, Berkshire. Electrical equipment. Rock 'n' roll and popular music. Philips, 3 in. to 7 in.; 1½, 3½, 7½ i.p.s. U.S.A. or Canada.

RUPERT DODDS, Photographer and Photo Salesman, 15 Court Drive, Bel Royal, Jersey, Channel Isles. Still and cine-photography, music (other lands). Anything but absolute highbrow (George Shearing favoured). Stellaphone ST 450, up to 7 in.; 1½, 3½ and 7½ i.p.s. Anywhere.

CHARLES H. LONG, Collection Manager, 10 Valley Hill, Loughton, Essex. Music, woodworking, dancing and general. Popular, swing (especially Miller, Anthony, Dorsey, etc.). Truvox Mark C, up to 7 in.; 3½ and 7½. U.S.A., Australia and Norway.

ARTHUR HENDERSON, Mail Clerk, 30 Randolph Road, Southall, Middlesex. Colour photography (35 mm.). Choral, operatic, light music (not rock 'n' roll). Reps R30, up to 7 in.; 3½, 7½, 15. U.S.A. (Pittsburgh and Washington, Penna.), and anywhere in British Isles.

GEORGE F. NEWLAND, Postal Worker (P.H.G.), 18 Esdelle Street, Norwich, Norfolk. Hi-Fi sound, music, records. Pop., light orch., dance, etc. Brenell 3 Star, 7 in.; 1½, 3½, 7½. Any.

DAVID WOLSTENHOLME, Fireman, 73 Darley Street, Brownlow Fold, Bolton, Lancs. Electronic music and the Hospital Tape-recording Service I run. Fanatic for learning something new. Ravel's Bolero, etc. Brenell Mk. IV, up to 8½ in.; 3½, 7½, 15. I would like contacts anywhere that would exchange tapes for the hospitals.

DESMOND MAWBY, Machine operator, 10 Hanworth Close, Leamington Spa. Brass bands (ex-military bandsman). Any, but mainly bands. Grundig TK 20, 5½; 3½ i.p.s. Anywhere (in English).

BARRY WILLIAM HODKINSON, Cinema Projectionist, 38 Rodney Street, Macclesfield, Cheshire. Audio, tape-recording, herpatology. Pops., Dixieland, light classical, not jazz. Körting Mk. 112, 7 in.; 3½ i.p.s. Anywhere.

HILARY JOYNSON (Mr.), Student, teaching

Maths., age 18, 27 Biddle Road, New Parks, Leicester. Music, travel (cycling, etc.); pianist in dance band. Any type, particularly swing (Miller, Basie, etc.). Philips AG 8108, 7 in.; 1½, 3½, 7½. Anywhere (including Britain).

LALAGE GROVE, Secretary, age 17, 20 Hartington Villas, Hove, 4, Sussex, England. Photography, tape-recording. "Pop." country and Western, and folk music. Telefunken 75 K-15, 5½; 1½, 3½ i.p.s. U.S.A. only.

CHARLES TAYLOR, P.S.V. Conductor, 58 Ballantrae Place, Dundee, Angus. Various. Classical and light. Philips, 7 in. or smaller; 1½, 3½, 7½. Anywhere.

NEVILLE R. TAWN, Newsagent's Manager, 39 London Road, Chatteris, Cambs. Cacti and other succulents. Anything bar heavy classical. Collaro Deck and Mullard "A" Amp., up to 7 in.; 3½, 7½, 15. Anyone anywhere, who can speak English.

KENNETH SINCLAIR, Trainee Textile Salesman, age 19, 77 Ballogie Avenue, Neasden, N.W.10. Modern piano, jazz, films, reading. Classical, modern and trad. jazz. Grundig TK 20, 5½ in.; 3½ i.p.s. U.S.A., Far East, Australasia and Africa; can speak some French and German.

BRIAN G. ANDERSON, Prep. School Schoolmaster, Town Close House School, Norwich, Norfolk. NOR 63D. Sailing, church architecture, organs. Classical, church music, organ music. Philips AG 8108/02, 7 in.; 1½, 3½, 7½. Germany, England.

D. GARRARD, Shop Salesman, 17 Hill House Road, Ipswich, Suffolk. Stamp collecting (G.B. and U.S.A.), growing cacti. Trad. jazz (Bing Crosby and Michael Holliday). Philips, 5 in.; 3½. G.B. and U.S.A.

**NOW  
AVAILABLE  
IN THIS COUNTRY  
FOR THE FIRST  
TIME!**

## FERRODYNAMICS "BRAND FIVE"

Magnetic Recording  
Tapes

- Made in U.S.A.
- Fully Guaranteed

Acetate			Mylar Dupont		
5"	600 ft.	16/-	All	Professional Quality	
5"	900 ft.	18/6	Post	5" 1200 ft.	37/6
5½"	1200 ft.	23/6	Free	7" 1800 ft.	44/-
7"	1200 ft.	25/-		7" 2400 ft.	60/-
7"	1800 ft.	35/-		Each on Plastic Spool	

TRADE ENQUIRIES INVITED

Tape & Accessories by  
E.M.I., Scotch and  
B.A.S.F. always in  
stock. Sent by return  
at advertised list prices  
—Post Free.

NEW COMPETITIVELY  
PRICED TAPE  
RECORDER KIT  
NOW READY  
Full details on request

We shall be pleased to demonstrate and supply Tape Recorders by:  
Ferrogaph, Vortexion, Reflectograph, Simon, Grundig, Brenell,  
Fi-Cord, Telefunken, Truvox, etc., etc.



## CLYNE RADIO LTD.

18 Tottenham Ct. Rd., London, W.1  
99 Cheapside, London, E.C.2  
162 Holloway Road, London, N.7

ROBERT FERGUSON (4251533 LAC), R.A.F. Regular, age 20, A.T.C., R.A.F., Marham, Kings Lynn, Norfolk. Horse riding. Light opera, rock 'n' roll, comedy records. Grundig TK 5, 5½; 3½. Anywhere (English speaking).

MATTHEW ERIC MOORE Galvanizing at Steelworks, 10 Swan Crescent, Beaufort, South Wales, Mon. Reading, youth club movements, amateur acting. Anything (except jazz and highbrow music). Grundig TK 20, 5½ in.; 3½ i.p.s. America, Canada or Australia.

ARCHIBALD MacINTYRE, Linotype Operator, 1 Priory Avenue, Lesmahagow, Lanarkshire, Scotland. Radio construction, S.F., Hi-Fi, records. Pops., Dixie, big-name bands, male voice choral. Collaro, home-built Amp., 7 in.; 15, 7½, 3½. Anywhere English spoken; all tapes answered.

JOHN SYDNEY GEORGE POTTER, Boot and Shoe Clicker, 145 Avondale Road, Kettering, Northants. Amateur filming (9.5 mm.). All sorts (not jazz). Ferrograph, Telefunken, Clarion, up to 8½ in.; 7½ and 3½. All parts (English only).

MATTHEW JAMES BONNER, Contracts Clerk in Stockbrokers' Office, age 18, 28 Rushie Avenue, Pendower, Newcastle-upon-Tyne, 5. All sports, music (except classics). All types of music (except classical). Grundig TK 20, 5½ in.; 3½. Anyone, anywhere.

CYRIL D. COX, Insurance Broker, 18 Vale Crescent, Cheadle Hulme, Cheadle, Cheshire. 8 mm. cine, 35 mm. still, travel. Anything suitable for cine-sinc. Elizabethan Escort, 7 in.; 1½, 3½, 7½. France, Africa, India and all points East. I speak some Urdu.

SEAN C. HICKEY, Schoolboy (5th year Grammar School), age 16, Leap House, Cromer Road, Sheringham, Norfolk. Photography, reading (travel books), tennis, hockey, travel. Musicals, Gilbert and Sullivan, pops. Philips EL 3527, up to 5 in.; 3½ i.p.s. U.S.A., Canada, France, E. Africa (Kenya, Uganda, etc.).

WARREN CASSIDY (a blind person), 807 N. Madison Avenue, Los Angeles 29, Calif., U.S.A. Psychology, sociology, life in other lands. Jazz, folk music, sincere popular, symphonies. 5½ in.; 3½, 7½. England, Ireland, Scotland, Scandinavian countries particularly, but would like to hear from anyone.

J. MORRISON, Capstan Setter, 47 Clara St., Benwell, Newcastle-upon-Tyne, 4. Traditional jazz. Jazz and early Bing Crosby discs. Walter 101, 5 in.; 3.75 i.p.s. U.S.A.

DAVID GEORGE TURTLE, Export Sales Clerk, 3 Fremantle Road, Belvedere, Kent. Varied, but particularly aero-modelling, tape, radio, mechanical. Pop, modern jazz (Duke Ellington), classics and powerful music. Telefunken 85, up to 7 in.; 3½, 7½. English speaking (home and abroad), and American speaking; both sexes. Tapes answered anywhere.

ALAN S. TAYLOR, A.I. Technician. (Cattle), "Greenbanks," Caldecote, Cambs. Land yachting, S.W. radio, aquaria. Modern and traditional jazz. Wyndor Viscount, 3 in. to 7 in.; 3½, 7½, 15. Sweden, U.S.A., Italy.

JEFFREY A. SCHER, Asst. Sales Manager in Wholesale Cycle Firm, age 20, P.O. Box 628, Bulawayo, Southern Rhodesia. Photography, pistol shooting, fencing, motor car engineering. Classics of the lighter type (not rock 'n' roll). Philips, up to 7 in.; 1½, 3½, 7½ i.p.s. Australia, New Zealand, England, U.S.A., Canada, but willing to tape-pond with English-speaking persons anywhere.

JAMES MILLS, Labourer, 55 Helredale Road, Whitby, Yorks. Cycling. Popular. Telefunken 76, 7 in.; 3½ and 1½ i.p.s. Any far-off country.

RONALD HOOPER, Management Consultant, Flat 3, Tresco, Wardle Road, Sale, Cheshire. Rugby, films, motoring, languages. All, particularly chamber. Harting HM 5, 7 in.; 7½ and 3½. Anywhere, speaking English, German or Russian.

## INTER-TAPE NOTEBOOK

### JULIE TAPESPONDS

"MY FAIR LADY" Julie Andrews opened the 1960 Audio Fair and revealed that she was a convert to tapesponding, having exchanged tapes with her husband when their different jobs separated them. Julie added that the spread of tapesponding should be encouraged as it would undoubtedly lead to greater friendship throughout the world. We agree wholeheartedly with these sentiments, and have made this a bumper tapesponding issue, with more people listed than ever before.

Our moving book was a great success on the "A.T.R." stand at the Fair. Several people recognized tape-pals thereon, and some remarked that they were seeing their friends for the first time.

We were asked many questions at the Fair. One was: "Do Iron Curtain countries censor tapes sent from England?" We felt that it depended what you said on the tape. However, a more authoritative answer to this question may shortly be forthcoming from Letchworth, where the pupils and teachers of St. Christopher School are making recordings to go to a school in Moscow which has indicated its willingness to participate in an exchange.

### FAIR ENOUGH

Beryl and I were having a rest from the hustle and heat of the "A.T.R." stand at the Russell Hotel, up in our temporary office there, when there was a sudden knocking at the door. I opened it, to be confronted by a woman who said in urgent tones: "Are you SHURE?"

### TAPE DELAYS FROM SOUTH AFRICA

We hear from South Africa that the difficulties they are going through at present have caused many tapespondents to ask their friends out there for details of the trouble and their racial policy. However, the State of Emergency declared by the South African Government prohibits the recording of anything likely to lead to a breach of the peace, and no overseas tapes can be returned as yet.

### WHAT'S IN A NAME?

Like a returning plague come the objections to the term TAPESPONDENT. But as though through a perfect vacuum come the suggested alternatives. What else can we call this facet of the tape-recording hobby? Here are some names which have been suggested: tapesending, inter-taping, travel-taping, sound-writing, sonotry, magnetting, transtaping, ferritting . . . any more suggestions?

### S.A.B.S.

Have received a tape containing an excerpt from a performance of "Dial 3½, 3½, 3½" by The Stanley Avenue Broadcasting Service, who are, and I quote, "brought to you on two and a half gas meters and one motor cycle". The performance was admirable—apart from localized outbreaks of laughing hysteria!

### QUICK CHANGE

F/O L. J. S. Spicer, who appeared in last month's Directory, called on the Office to say that he is now back from Khormaksar, Aden, to 37 Martyrs Field Road, Canterbury, Kent, so take note tapespondents. Incidentally his tape equipment now comprises a Nordmende 'Titan' and Steelman.

AMATEUR TAPE RECORDING

*Dear Sir,*

**ANSWERS TO TECHNICAL QUERIES**

The Panel of technical advisers of A.T.R. have been overwhelmed with letters and we apologise for any delay which may occur in replying. We feel sure that readers will appreciate that in a large number of instances it is necessary for the panel to acquire particular equipment in order to answer queries accurately and this of course takes time. Finally we would mention that due to the volume of correspondence we must now restrict this service to members of the B.R. Club and affiliated clubs only.

**JOHN A. POLLARD**, of Manchester, 16, says:

I was experimenting before Christmas with the manufacture of a tape "recorder" with no valves. I dismantled an old earphone and used this as a recording head. If this was connected to a battery (4.5v.) and a switch incorporated in the circuit, a noise could be recorded on the tape if one operated the switch as a morse key. Is it possible that a microphone could be included?

*ANSWER.*—Sorry. Your idea is not a new one, and was in fact the principle of the early wire recorder. You would in any case need a bias oscillator to effect proper recording.

**R. H. GOODALL**, of Mickleover, Derby, asks:

Being an amateur tape recording enthusiast, I am thinking of constructing at not too great expense a small soundproof room and would welcome your advice.

It will have to be about 9 x 5ft. and 8/6ft. high and situated in an upstairs room. This will mean that floor insulation is necessary; the corners of the room will form two sides of the cubicle and complete soundproof qualities are required as outside noises will be present. Ventilation will be required.

*ANSWER.*—To completely soundproof a room is a highly expensive business and beyond the resources of the amateur. If, however, you would be satisfied with greatly reduced reverberation, you could line the room with a dummy plaster wall, set off from the main walls by about 2in., so leaving a space all round inside, which could be filled with almost any soft material. The floor could be covered with thick carpet under-felt. This would give a sound absorption co-efficient of about 0.1%. Apart from this, little else can be done that is not expensive to produce a greater absorption co-efficient.

**MISS E. J. SUTTON** of Crawley, in preparation for an overseas appointment, writes:—

I am shortly going to the tropics, Nigeria, where it is hot and humid, and wish to take a portable tape



recorder. I wish to use the recorder mainly for use in the classroom (I am a teacher) and it is essential that it should have sufficient volume for a normal sized classroom—it is essential that the speech should be clear as the students will be taking it down in shorthand. Secondly, I shall be recording the voices and sounds of that country.

Is it possible to get a recorder that will stand up to tropical conditions and also be light to carry about?

I should be glad if you could recommend a tape recorder.

*ANSWER.*—There are few recorders that will suit your exact demands. For instance none of the small portable recorders will give sufficient volume for classroom use. The larger mains operated instruments are too cumbersome to carry about much but on the other hand will provide enough output for playback in a classroom full of children.

Forgetting portability for the moment, the Ferrograph special school room recorder would be ideal for classroom work and is substantially housed in a Teak case. It should stand up to tropical climates. The output power is sufficient for your requirements.

We doubt if any of the small battery operated portables would stand up to tropical climate. The only one that might is the Fi Cord but you should check with the makers as to whether tropicalized components are fitted.

Your problem could only really be solved satisfactorily by using a larger mains operated instrument for the classroom and a portable for outdoor

## LANGUAGE COURSES ON TAPE

**Full elementary courses in French, German and Spanish by National Broadcasters. Full recorded tape at 3.75 i.p.s. speed together with instruction book 29/6d post paid.**

Please apply for explanatory leaflets to your nearest retailer or direct to:-

**FISHER ELECTRONICS CO. LTD.**

60-66 Wardour Street, London, W.1 Tel: Regent 7597



recording but do check up with the makers about tropicalization of components and fittings. Humid atmospheres and tropical insects can ruin electronic equipment overnight if it is not properly finished and protected.

Mr. J. C. CARMICHAEL of Ayrshire writes to say: I would like to know how to remove hum after a recording has been made with the microphone, on my Recorder. The hum does not appear to be motor noise, nor does it appear on the tape after using a tuner or pick-up in the Gram sockets. No hum shows after making a silent recording (with no input). I would appreciate any help that you can give me on this matter.

**ANSWER.**—You cannot remove the hum from your recordings, you can only prevent the hum getting on them in the first instance. The source of trouble is obviously the microphone or its associated lead or the microphone amplifier circuitry.

If you are using a low impedance ribbon or moving coil microphone, hum can be induced into it from a nearby mains transformer such as the one in the recorder itself.

If the microphone is a crystal type the hum may be picked up through a poorly screened microphone cable, microphone jack or socket. Failing this the hum may be getting in at the microphone amplifier valve itself. In this latter case there is not much you can do except to speak closer to the

microphone and reduce the gain whilst recording or have a competent engineer check over the recorder and see if it is possible to cure the trouble.

You may have a recorder with a poorly designed input circuit, in which case only extensive modification may clear this trouble.

Mr. E. J. FINELOW of Warrington Lancs., tells us: I have a Ferrograph 3S/N and I am considering purchasing a Sound News Unimixer 2. The recommended load impedance is not less than 500 K ohms. What do they mean by this? Also I am considering buying a Grampian DP4.H microphone. Would this match up with the recorder and the mixer?

**ANSWER.**—The mixer you contemplate buying may not be suitable for the Grampian DP4.H microphone unless you have the necessary pre-amplifier. The load impedance of the mixer will be suitable for the 3SN recorder but we advise you to enquire of both Sound News and Grampian as to whether the pre-amplifier that goes with the mixer is suitable for the DP4.H microphone, as we believe it has an impedance of about 1000 ohms. They may possibly make a high impedance model.

Impedance matching is a rather complex subject which could not be fully explained in these columns. However, you could keep in mind that any radio or electronic equipment having a specific impedance must be matched with a like impedance in order to transfer power or voltage without loss. For example, an amplifier having an output impedance of 15 ohms must be used with a loudspeaker with the same impedance if the full power from the amplifier is to be transferred to it.

Mr. W. A. WILDING, of Bedford asks:— I would like to become a member of the B.R.C. but I do not own a tape recorder and I have collected so much literature that my mind is full of i.p.s., dB., input levels etc.

I would like to make a tape recorder/record player to play through my radio which is a Loewe-opta Meteor. Could you suggest a tape deck and necessary pre-amplification to play through my set which has the necessary connections?

I can afford about £60-70 and would like the best value for money, and a set which is not going to become outdated too soon.

**ANSWER.**—Unless you have a fairly sound experience in constructing electronic equipment you may run into difficulties in attempting to build your own recorder.

The amplifiers are of a special kind and quite a lot of complicated circuitry is involved between tape deck and amplifiers. You could of course buy a tape deck such as the Wearite which has an excellent performance and use it in conjunction with a Mullard C type amplifier which can be purchased ready made from some London Hi Fi dealers.

Even then you may have to work out the inter-connections between deck and amplifier for yourself as little information is given with purchased equipment. You would do better to consider buying a complete recorder, for there are many excellent machines available for the price you have in mind.

# BOGEN

## TAPE HEADS

### 4 TRACK STEREO

### TWO TRACK STEREO & MONO

Bogen Tape Heads are found in fine recording equipment all over the world. They are made by Bogen of West Germany, who specialise exclusively in the manufacture of magnetic heads to extraordinarily high standards of design and performance. Many new and original techniques are used in their production, the results of which are instantly apparent in use. Particular attention is drawn to Bogen 4-track heads for stereo and other multi-channel requirements. These are supplied in sets for record/replay and erase. Two-track stereo and mono heads are also available.

- **FREQUENCY RESPONSE:** 30-16,000 c/s at 3½ i.p.s.; 30-10,000 c/s at 1½ i.p.s. using high quality tapes and amplifiers.

- **MAGNETS:** Finished to micro-precision standards of accuracy.

- **GAP:** 3.5 microns (0.0001375") ground and lapped (twice as good as normally accepted standards).

- **CONSTRUCTION:** To very small size, with screened leads. Mono heads faced with special plastic surround to ensure perfect contact. All heads mu-metal shielded.

Set of 4-Track Heads for Record/Replay and Erase **15 gns Retail**

**SPECIAL TERMS TO MANUFACTURERS  
TRADE ENQUIRIES INVITED**

Sole distributors for U.K. and the Commonwealth

**GOPALCO LTD.**

1 LONG ACRE, LONDON, W.C.2

Phone: COV 2052

# AUDIO FAIR Continued from Page 17

**Pamphonic Reproducers Ltd.**  
17 Stratton Street, London, W.1.  
*PAMPHONIC. Amplifiers and pre-amps, loudspeakers, P.A. equipment, tuners.*

**Pye High Fidelity Division**  
65 Fairview Road, London, S.W.16.

*PYE. Amplifiers and pre-amps, loudspeakers, tuners and kits.*

**Pye Group Record (Sales) Ltd.**  
10a Chandos Street, London, W.1.  
*PYE. Records.*

**N. & S. B. Field & Co. Ltd.**  
Brook Road, London, N.22.

**RECORD HOUSING.** Cabinets and enclosures.

**Multimusic Ltd.**  
Hemel Hempstead, Herts.

**REFLECTOGRAPH.** Model B, with Multimusic deck.

**Reslosound Ltd.**  
London Road, Romford, Essex.

**RESLO.** Microphones, loudspeakers, P.A. equipment.

**Rogers Developments (Electronic) Ltd.**  
Barmston Road, London, S.E.6.

**ROGERS.** Amplifiers and pre-amps, cabinets, loudspeakers and tuners.

**Minnesota Mining & Manufacturing Co. Ltd.**  
Wigmore Street, London, W.1.

**SCOTCH BRAND.** Magnetic recording tape.

**J. W. Maunder**  
95 Hayes Lane, Beckenham, Kent.

**SHURE.** Microphones, pick-ups, arms, cartridges and styli.

**Simon Equipment Ltd.**  
48 George Street, London, W.1.

**SIMON.** Microphones, tape recorders, including the new "Minstrelle" with Garrard deck.

**Specto Ltd.**  
Vale Road, Windsor, Berks.

**SPECTO.** Tape recorders, including the Spectone 171 with Garrard deck.

**Standard Telephones & Cables Ltd.**  
Connaught House, London, W.C.2.

**STC.** Microphones, amplifiers and pre-amps, loudspeakers, mixers, valves.

**Redifon Ltd.**  
Broomhill Road, London, S.W.18.

**STEELMAN.** Tape recorders, record reproducers.

**Recording Devices Ltd.**  
44 Southern Row, London, W.11.

**STUZZI.** Microphones, mixers, tape recorders.

**Tannoy Products Ltd.**  
West Norwood, London, S.E.27.

**TANNOY.** Amplifiers and pre-amps, loudspeakers, pick-ups, cartridges and styli.

**Welme Corporation Ltd.**  
147 Strand, London, W.C.2.

**TELEFUNKEN.** Tape recorders, mixers, recording tape and microphones.

**Teppaz S.A.**  
170 Boulevard de la Croix Rousse, Lyon (Rhône), France.

**TEPPAZ.** Record players, amplifiers, pre-amps, loudspeakers, records, pick-ups, cartridges and styli.

**Trix Electrical Co. Ltd.**  
1/5 Maple Place, London, W.1.

**TRIX.** Amplifiers and pre-amps, microphones, tape recorders, tuners, P.A. equipment, record reproducers.

**Truvox Ltd.**  
Neasden Lane, London, N.W.10.

**TRUVOX.** Amplifiers and pre-amps, tape recorders, tape decks, and radio jacks.

**Technical Suppliers Ltd.**  
63 Goldhawk Road, London, W.12.

**T.S.L.** Loudspeakers, microphones, mixers, tape recorders, and pre-recorded tapes.

## Brown Band 195 (Acetate base)

600'	5" spool	17/-
850'	5½" spool	23/-
1,200'	7" spool	27/6

## Green Band 211 \* (Acetate base)

600'	5" spool	21/-
850'	5½" spool	28/-
1,200'	7" spool	35/-

## Long Play 601 \* (Mylar base)

225'	3" spool	9/-
900'	5" spool	28/-
1,150'	5½" spool	35/-
1,800'	7" spool	50/-

## Double Play 724 \* (Tensitized Mylar base)

300'	3" spool	13/9
600'	4" spool	25/-
1,200'	5" spool	45/-
1,650'	5½" spool	52/6
2,400'	7" spool	80/-

\*Ferro-sheen process

# irish AMERICA'S FAVOURITE TAPE

Optimum fidelity is ensured by the exclusive Ferro-sheen process—an integral part of the tape manufacture—which offers the following distinct advantages:



Exceptional high frequency response, due to intimacy of contact between tape and heads.



Minimum head wear.



Freedom from head contamination by oxide build-up.



Considerable reduction in background noise.



Minimum drop-outs (temporary loss of signal).

**IRISH Brand Tapes** are produced by Orr Industries Inc.—a division of the **AMPEX CORPORATION**—thus a combination of the Masters of Tape Manufacture and the Masters of Sound Equipment cannot fail to produce a tape of the highest quality.

**IRISH BRAND SP-3 TAPE SPLICER.** The only Tape Splicer available incorporating twin cutting devices. Produces professional-style splices in a few seconds, without scissors or razor blades. **Price 67/6**

Sole Distributors:

**WILMEX LTD · 70 ST. STEPHEN'S HOUSE · BRIDGE ST · LONDON S.W.1**

**Veritone Ltd.**  
Potters Bar, Middlesex.  
**VERITONE.** Mixers, tuners, tape recorders, including the new "Venus" with four speeds.

**Vortexion Ltd.**  
The Broadway, London, S.W.19.  
**VORTEXION.** Tape recorders, mixers, amplifiers, pre-amps, and P.A. equipment.

**Walter Instruments Ltd.**  
Garth Road, Morden, Surrey.  
**WALTER.** Tape recorders, including the 404 and for the first time a transistor mains/battery portable.  
**Wellington Acoustic Laboratories Ltd.**  
Farnham, Surrey.  
**WAL.** Loudspeaker systems, tape accessories, pre-amps, and the pocket audio oscillator.

**Wharfedale Wireless Works Ltd.**  
Idle, Bradford.  
**WHARFEDALE.** Loudspeakers, volume control, P.A. equipment.  
**Whiteley Electrical Radio Co. Ltd.**  
Victoria Street, Mansfield, Notts.  
**W.B. STENTORIAN.** Amplifier and pre-amps, loudspeakers, tuners, enclosures, P.A. equipment.  
Latest products: 12in. speaker and 8in. console cabinets.

## CLUBMAN REQUESTS

Clubman George Patrick, of Ontario, Canada, wishes to point out that his tapesponding listing appearing in the December "A.T.R." was incorrectly addressed. Members wishing to contact him should write to: George Patrick, 138 Eighth Street East, Cornwall, Ontario. "A.T.R." apologises for any inconvenience caused by clubmen who have written to the address given in the December issue.

Mr. R. V. Huddleston (Grantham Tape Club Chairman), of 33 London Road, Grantham, suggests that stereo enthusiasts form a club devoted to their particular field of recording. Enthusiasts interested, please contact Mr. Huddleston at the above address.

## NEW ZEALAND LINK

Denis Ryan, of 252 Bealey Avenue, Christchurch, C.I., South Isle, New Zealand, writes to say that he would be glad to co-operate in a playback service for any member who has friends in New Zealand. He is interested in tapesponding with anyone at home and abroad.

Joel McGaughey tells us that he was taken ill at the time that his name appeared in the Directory and, having to spend the next eight weeks in hospital, he may have missed answering some of the letters received. However, he is now well again and says that he will answer all tapes, and take part in any Round Robins. No need to write first. Just send the tape to Joel McGaughey, 230 N. Craig Street, Pittsburgh 13, Pa., U.S.A.

# TELE-RADIO FOR TAPE RECORDING EQUIPMENT

All Goods Delivered — Carriage, Packing and Insurance FREE! (U.K.)

## TAPE RECORDERS

**REFLECTOGRAPH STEREACORDER, Model 570**  
Records and reproduces monophonically, stereophonically. Including separate speakers ... 149 Gns.

**REFLECTOGRAPH RECORDER, Model 500**  
Variable speed between 8 and 3½ i.p.s. 3 heads. Separate record and replay amplifiers. 94 Gns.

**VORTEXION RECORDER, Model WVB**  
Monitoring facilities. Recordings can be superimposed. Echo effects can be made ..... £110 3 0

**VORTEXION RECORDER, Model WVA**  
Adjustable bias. 4W Output ..... £93 13 0

## FERROGRAPH RECORDERS

**Series 4A—**  
For Standard Monaural Recording/Playback  
Model 4A/N (3½/7½ i.p.s.) ... 81 Gns.  
Model 4A/H (7½/15 i.p.s.) ... 86 Gns.

**Series 4S—**  
With additional stacked head for playback of pre-recorded Stereo Tapes.

Model 4S/N (3½/7½ i.p.s.) ..... 88 Gns.  
Model 4S/H (7½/15 i.p.s.) ..... 93 Gns.  
Model 808 (3½/7½ i.p.s.) monaural/Stereo ..... 105 Gns.

Stere-Ad Unit ..... 30 Gns.

**BRENELL Mk. 5 RECORDER**  
Four speed, 1½", 3½", 7½" and 15"... 64 Gns

**MINIVOX Transistor Battery Portable**  
1½ i.p.s. Wgt. 6lbs. Batteries run for 100 hours incl. mike. .... 37 Gns.

**SIMON "MINSTRELLE" with**  
exclusive built-in mike. .... 39 Gns.

## MICROPHONES

Reslo Ribbon High Impedance ..... £9 5 0  
" " Low " ..... £8 15 0

Film Industries Ribbon High or Low Impedance ..... £8 15 0  
Cadenza Ribbon in case with table stand and lead ..... £10 10 0

Tannoy Ribbon 600 ohms Line with table stand and lead ..... £10 19 6

Lustraphone Moving Coil CS1Z ... £5 17 6  
" LD61 ... £3 7 6

Collaro "Studio" Crystal Hand ... £2 5 0  
Acos Crystal Stick ..... £3 3 0

Acos Mic/40 Crystal Desk ..... £1 9 6

**MICROPHONE MATCHING TRANSFORMERS**  
Woden 100 : 1 ..... £1 11 6

Ferrophone ..... £2 6 0  
Cadenza ..... £3 17 6

**MICROPHONE STANDS**  
For Desk Use ..... from £1 5 0  
For Floor use ..... from £3 12 6

This is representative of our tape equipment only. We also keep a full range of:

**Amplifiers • Transcription Units  
Players • Tuners • Speakers**  
and all items for Monaural and Stereo Hi-Fidelity and reproduction. We manufacture cabinets to customers' personal taste to suit equipment selected.

Goods sent to all parts of the world  
An up-to-date 66-page Catalogue is available.  
1/- plus postage and packing 6d.

## TAPE DECKS

**WEARITE** 4A 3½/7½ i.p.s. .... £36 10 0  
4AH 7½/15 i.p.s. .... £41 10 0

4B 3½/7½ i.p.s. with monitor head ..... £41 10 0

4BH 7½/15 i.p.s. with monitor head ..... £46 10 0

4C 3½/7½ i.p.s. .... £46 10 0

4S 3½/7½ i.p.s. .... £43 17 0

**BRENELL** Mk. 5 Deck (4 speeds) £29 8 0  
Mk. 4 " (3 speeds) £24 12 0

**COLLARO** Mk. 4 Deck ..... £25 0 0

## MASTERLINK TAPE UNIT M2A AND COLLARO "STUDIO" DECK

Build your own Hi-Fi Tape Equipment using our tape pre-amp and the new Collaro deck.

INC. PRICE 41 gns. Carr. 10/-.  
Complete with instructions.

The M2A is complete with external power pack and is also suitable for use with Wearite and Brenell decks, C.C.I.R. Characteristic.

PRICE 27 Gns. Plus P. & P. 4/-.  
Leaflet on request.

HIRE-PURCHASE TERMS AVAILABLE

Immediate dispatch of goods available from stock.

## TELE-RADIO (1943) LTD.

189 EDGWARE ROAD, LONDON, W.2

A few mins. from Marble Arch • Our only address • Open all day Saturday (1 p.m. Thurs.)

Telephone :  
PADdington  
4455/6



# CLUBMAN PROFILE...

## The Men and Women behind the "MIKE"

ALTHOUGH I have owned a tape recorder for nearly five years, it is only in the last four months, since joining the B.R.C., that I have delved more deeply into this absorbing hobby.

My first recorder was a Grundig TK5 and I used this for nearly four years, principally for taping music and radio programmes, without once realizing the enormous fun I was missing! A year ago we sold our reliable old TK5 and bought a Ferrograph 4S/N, 3½ and 7½ i.p.s.

I think it was about this time that I began to feel the first twinges of tape fanaticism!

I then began to spend money at rather an alarming rate, purchasing in quick succession a high-quality record-playing deck, a 20-watt amplifier, a V.H.F. tuner, a 12in. loudspeaker and finally a stethoscope headset. This last item became an absolute necessity as my husband sits glued to the Idiots' Lantern most evenings. If any tapespondent knows a good cure for square eyes I would be delighted to hear of it, although my husband has gone somewhat beyond this stage and now has a square head!

Seriously, though, the best thing I have done so far is to join the B.R.C. Through the Club I have already been lucky in contacting another tapespondent who, like myself, is a novice.

I find the most difficult thing to overcome is my self-consciousness behind the microphone, but I hope that as I get more experience I will overcome this.

Unfortunately, being a married woman, my free time is strictly limited, as for some inexplicable reason the other half insists on eating regularly!

I would, however, welcome tapes from any member who is a particular fan of Eydie Gormé. I have a special weakness for her records, and although it strains the family budget I have managed to obtain all her L.P.s and most of the singles released in this country.

My other hobbies are driving (I passed my test six months ago and still haven't got over the thrill of it) and photography, particularly cine.

We went in for a motor rally a couple of weeks ago and although we were the first to complete the course, we made some silly mistakes and only finished eighth. Just our luck—there were prizes for the first seven.

Last year we went to Austria for a holiday and shot six reels of colour cine film (8mm.), also about 130 transparencies on 35mm. We have had great fun watching the films and after two or three false starts we have managed to tape a synchronized commentary.

The next thing we are hoping to do is film a short play complete with sound track and titles—the lot! Funnily enough, we haven't yet been able to decide



*Mrs. Betty Walker*

on a suitable subject. It sounds easy, but you would be surprised how difficult it is sorting out material for a ten-minute film.

Finally, I must congratulate the staff of this magazine. I really look forward to receiving my copy each month and only wish it could be published more often.

## LEARN RADIO & TV SERVICING this new, easy, practical way!

**YOUR OWN...BUSINESS...  
CAREER...OR  
FASCINATING HOBBY**



**LEARN THE ESSENTIALS OF  
ELECTRONICS AT HOME AND  
TURN YOUR KNOWLEDGE TO  
GOOD MONEY MAKING PURPOSE  
RADIOSTRUCTOR EQUIPMENT-  
COURSES MAKE LEARNING  
SO SIMPLE!**

Learn by building actual equipment from the big kits of components we send you. Our teaching staff employ the latest techniques and there are no complicated mathematics! You end by possessing a first-rate piece of home equipment with the knowledge of how it operates, and how to service and maintain it! These courses can be provided at very moderate cost with easy payments available. Post the coupon now for full details.

- NO MATHEMATICS
- EASY TERMS AVAILABLE
- ALL TEST EQUIPMENT SUPPLIED
- PERSONAL TUITION
- FINEST EQUIPMENT

**POST TODAY...FREE brochure**

To Radiostructor, Dept. 85  
46 Market Place, Reading, Berks.  
Please send Brochure without obligation to:

Name..... } **BLOCK  
CAPS  
PLEASE**

Address..... } **830**

*We do not employ representatives 5-60*

**RADIOSTRUCTOR**

Britain's Leading Radio  
Training Organisation

## WHO'S WHO

## AND WHAT IS MANUFACTURED

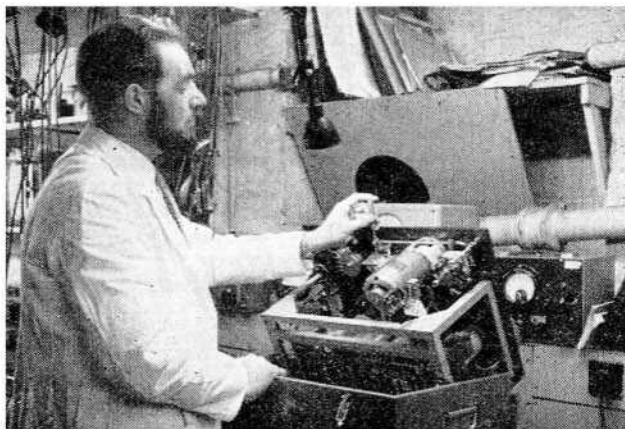
An A-Z of manufacturers and their equipment



IF YOU have a thousand pounds or so to spare, drop in at the Leever Rich factory in Hampstead Road, London, and have a custom-built professional Consol recorder made to measure; or perhaps you fancy a machine with eight tracks. Something cheaper? Let's consult the Leever Rich catalogue: oh yes, their model Series D, complete with mixer-amplifier and monitor speaker—£500. Well, *this is* professional class, but we thought readers might be interested in what constitutes a precision recorder of the highest order—how it is made—how it performs—and if you have a deep enough pocket where you can buy one.

Leever Rich are an old-established firm who were making recording equipment in 1936, long before

*The Chief Electronics Engineer tests a series D type recorder.*



## LEEVEES RICH

tape was invented, and by 1950 were producing the first syncro-pulse system for operation in conjunction with film; at this time ordinary domestic recorders were still in the "teething" stage. Five years ago all the major studios in the country were using Leever Rich equipment.

During a personal interview with Mr. Norman Leever, your reporter learned of new developments that are little short of amazing. The system of recording photographs on magnetic tape, for example; only with careful scrutiny was it possible to distinguish an original photograph from a copy produced from information stored on magnetic tape. The use of frequency modulation as a medium for high-quality recording is another major development.

Who buys all this expensive equipment? Here are a dozen or so names chosen at random from a long list of Leever Rich customers:

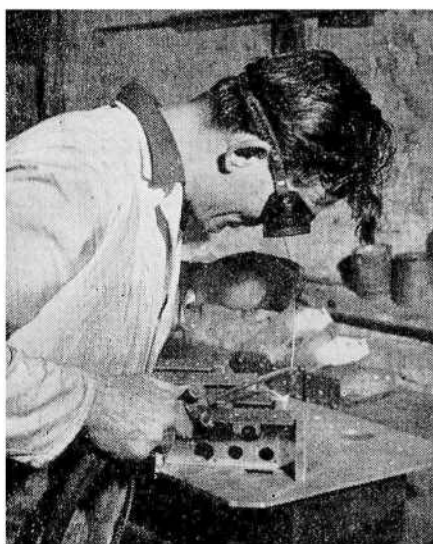
Associated British-Pathe Limited;  
Associated TeleVision;  
British Broadcasting Corporation;  
British Movietone Limited;  
C. Chauvel, Sydney, Australia;  
Department of Scientific and Industrial Research;  
Ealing Films Limited;  
Imperial Chemical Industries Limited;  
Marconi's Wireless Telegraph Company Limited;  
Metro-Goldwyn-Mayer (British) Studios Limited;  
National Physical Laboratory, Teddington;  
N.B.C. of America.

Leever Rich recorders and auxiliary equipment are used in medicine, aviation, computers and pure research, by the N.P.L., the R.A.F. and many other services. They produce portable equipment, fixed installations for broadcast and recording studios, mobile equipment and all kinds of precision recorders each designed for a special purpose.

Unlike other manufacturers, there is no process of repetitive production. The usual methods of mass manufacture simply would not do, as all Leever Rich equipment is individually designed, assembled and tested for a very high degree of performance. The only standardized equipment is their tape transport mechanism and the special plug-in tape-head units that are used exclusively on their recorders. Even these are made individually to a rigid specification. Yet despite this extreme precision most of the Leever Rich recorders and their associated amplifiers are flexible enough for adaptation to a variety of uses.

The equipment is ruggedly built, too. One of their recorders was dropped from a height of twenty feet or so on to concrete (it actually fell whilst being loaded on to an aeroplane) and on test continued to function properly in all respects. Another machine which was shown to the writer had been in daily use for ten years by the B.B.C. and had just been returned for service. This recorder was connected up and tested, and apart from having lost some of its paintwork appeared to require little more than the replacement of worn tape-heads.

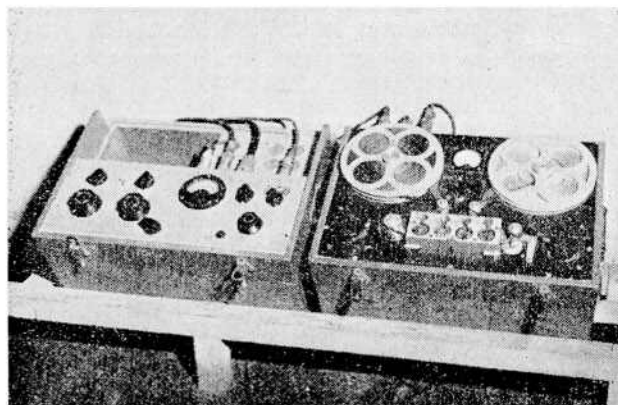
The applications of Leavers Rich recorders are many and varied. It is possible, therefore, to describe only one or two and give some idea of their function. The syncro-pulse recorder, for instance, which can be supplied as a portable model to operate from 12 volts D.C. or from an A.C. mains supply. This recorder employs a system that works on a control track principle, a continuous reference tone or timing signal being recorded on the tape simultaneously with the speech track. The control takes the form of a carrier which is modulated by the picture camera



*Welding Duraluminium Amplifier Chassis*

to produce a series of pulses at picture frame speed. The magnetic recording therefore consists of a speech track which runs alongside the carrier pulse track. These pulses bear the same relationship to the sound track as the frame lines bear to the picture image on the developed kinematograph film. Since the control track is physically part of the recording, it provides a means whereby the sound can always be re-played at a speed corresponding with the projection of the picture.

First-class engineering design and fine workmanship contribute to the excellent mechanical performance of these machines. The capstan unit is a specially designed one and consists of a hardened and ground shaft which carries a balanced flywheel driven axially by the capstan motor. No belts or friction drives are used. The recording heads are mounted in a block machined from solid duralumin, each compartment being fitted with mu-metal liners.



*Still in excellent condition and working after ten years of daily use by the B.B.C. This recorder is one of the first field-models made by Leavers Rich. (The head cover has been removed to show the assembly of the four tape heads).*

These head blocks are interchangeable and permit rapid slot loading of the tape, whilst the recording heads themselves are an exclusive Leavers Rich design.

Other machines have been designed and built for multi-track operation, FM and pulse systems, and one more that deserves mention is a Musique Concrète Recorder specially designed for the B.B.C. to their specification. This recorder uses eight tracks on a wide tape, which necessitates an eight-channel recording head. Separate recordings can be made on any track and transferred with a recording from another track, to any of the remaining tracks, and so on *ad lib*. The system allows erasure of any track without spoiling the recordings already made and finally enables all the recordings to be mixed for the final take.

The multi-track technique is also employed for special operatic and orchestral recordings, where each single track may be used for an individual artist or musician. The system permits separate control over each channel, so that the final recording may be correctly balanced without special rehearsals,

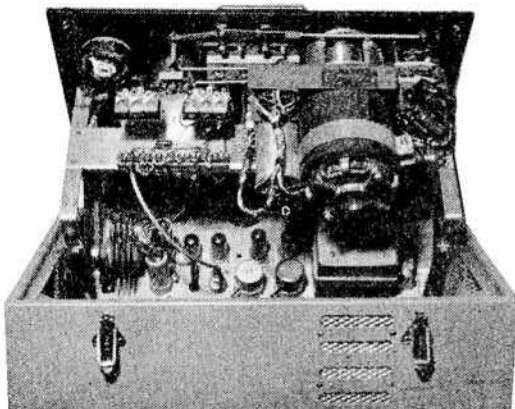
*Mr. Norman Leavers carries out a personal check with a Kalee Wow Meter.*





thus saving considerable time and expense. The producer simply selects and controls the level of each channel by monitoring whilst the master recording is being made. In other words, he rehearses with the recorded tracks instead of the artists, in order to shape the finished recording.

Much more could be written about the Leever's Rich organization and its products. From the drawing board to the finished recorder, through every stage of production and assembly, a careful check is kept on every component part. The finished instrument is then subjected to a rigid test programme



The interior of a Leever's Rich recorder. The whole unit is designed for ease of maintenance and lifts clear of the case for access to all components.

for which many hundreds of pounds' worth of test equipment is used. Skilled instrument makers and engineers all contribute their special knowledge and experience to the making of each and every recorder, which is guaranteed for its exceptionally fine performance.

The auxiliary equipment produced in this factory is worthy of mention, for numerous kinds of amplifiers, power supplies and mixing units are all produced with the same precision and finish. The writer was shown a multi-channel mixing desk, complete with level meters and numerous other facilities, and the well-known "Leeraser", which is a bulk tape eraser of unique design. These erasers will clean a tape in a matter of seconds, leaving it absolutely noise-free.

Finally, a brief tour of the workshops. There is a large machine shop, where most of the mechanical parts are turned out and assembled, and which includes the necessary equipment for making the special cases for the recorders. The assembled tape transcription units are wired and fitted with the electronic components in yet another workshop, and finally tested and aligned for operation in the test bay.

A visit to Leever's Rich is a worth-while experience, for one has to see precision equipment being made to appreciate fully the tremendous amount of work that goes into it. That is why these professional recorders are expensive—but worth it.

F. C. J.

## TAPE BARGAINS

BRAND NEW = BOXED = EXCELLENT QUALITY

5" 600 ft. 12/6	5½" 1200 ft. 21/0
5" 900 ft. 18/0	7" 1200 ft. 21/0
5½" 850 ft. 18/0	7" 1800 ft. 32/6

plus POSTAGE 1/- PER TAPE  
ALSO

TAPES By B.A.S.F. TELEFUNKEN,  
SCOTCH BOY, PHILIPS, AGFA,  
AUDIO, Etc.

## SEND FOR LISTS

FREE

OUR TAPE CHART GIVES TAPE RUNNING TIMES FROM 1½ I.P.S. TO 15 I.P.S. AND COVERS TAPE LENGTHS FROM 200 FT. TO 4,800 FT.

Send S.A.E. now for your FREE copy.

## Dickinsons of Pall Mall Ltd

11 Royal Opera Arcade, Pall Mall, S.W.1 TRA 2881

Behind Her Majesty's Theatre in the Haymarket

One minute from Piccadilly Circus or Trafalgar Square



ALL YOUR  
RECORDINGS CAN BE  
FOUND QUICKLY AND  
EASILY BY USING —

## METRO-TABS

3/11 per set

A new and scientific device designed to clean the record and erase heads of your tape recorder, and to reduce faults caused by oxide deposits. Price 12/6



Write for illustrated leaflets to:

## METRO-SOUND MFG., CO., LTD.

19a BUCKINGHAM ROAD  
LONDON N.1  
Telephone: CLIssold 8506/7

**NO INTEREST TERMS OVER 12 MONTHS ON**

**TAPE RECORDERS**

**TAPE RECORDERS**

**TAPE RECORDERS**

***WE MAKE THEM!***

***SELL THEM!***

***SERVICE THEM!***

***IT WILL PAY YOU TO VISIT—***

**THE**

**TAPE RECORDER SERVICE  
CO.**

**95 BECKENHAM LANE, SHORTLANDS, BROMLEY, KENT**

**Telephone : RAVensbourne 6119**

---

Please send without obligation on my part, details and Recorder Price Lists.

I am interested in purchasing.....outright.....easy terms.

NAME .....

ADDRESS .....

.....

# Tape it from here!

## Top FEATURES

- ◆ 3 speeds (1.7/8, 3.3/4, 7 1/2 i.p.s.). Takes 7" spools.
- ◆ Twin track—one way—fast rewind—pause control.
- ◆ Rev. Counter.
- ◆ 4 watts output.
- ◆ Frequency response 50-10,000 c.p.s.  $\pm$  3 db.
- ◆ Luminous column recording level indicator.
- ◆ Erase safety circuit.
- ◆ Tone control—treble boost with bass cut—bass boost with treble cut.
- ◆ Radio and Gram/Microphone inputs.
- ◆ Extension speaker and monitor outputs.
- ◆ Provision for superimposing.
- ◆ Switch for use as a separate amplifier.
- ◆ High quality 8" x 5" speaker.
- ◆ Strong laminated wood case—attractive two-tone rexine covering—heavy gilt fittings—storage space for tapes and microphone.

## Top QUALITY

True-to-life 'professional' sound  
plus real  
'professional' dependability.

## Top VALUE

only

# 39 gns.

including microphone,  
tape and spool.

Also available  
**MONOTAPE**  
single track 3.3/4 i.p.s.  
**29 gns.** incl. microphone and tape.



## See the New PORTOTAPE MARK 2

at your **DEALER'S NOW!**

or post coupon for **FREE** 12 p. brochure of tape recorders and record reproducers

To: Portogram Radio Electrical Industries Ltd., "Audio Works", Paxton Rd., Tottenham, N.17. Tel. TOT 7683

Name .....

Address .....

.....AT.1

## FRANCIS OF STREATHAM

● *The Centre for Personal Attention and respect for your Pocket*

### NO EXTRA FOR CREDIT

Minimum deposit & no interest or charges on HP up to 18 mths.

**FREE** service whilst under Guarantee

**HIRE SERVICE TAPE RECORDERS AVAILABLE**  
on hire from 45/- per week.

### MICROPHONES AND MIXERS

	£	s.	d.
Lustraphone LD/66	...	4	2 6
Lustraphone "Lustrette" M/C	...	3	7 6
Lustraphone VR/64 Ribbon	...	7	17 6
Lustraphone LFV/59 Dynamic	...	8	18 6
Simon "Cadenza" Dynamic	...	10	10 0
Simon Cadenza Crystal	...	3	13 6
Reslo Ribbon	...	8	15 0
TSL 3-Channel Mixer	...	2	2 0
Grundig Mixer	...	16	16 0

Also by Ronette, Acos, etc. We will gladly advise on the type best suited to your requirements.

### HI-FI & ASSOCIATED EQUIPMENT

	£	s.	d.		£	s.	d.
Decca ffs P.U.	21	0	0	Collaro 4T200	18	13	0
Rogers Junior FM	...	...	...	Lenco GL/58	19	17	6
Tuner	24	13	5	Garrard 4HF	18	17	8
Armstrong ST.3	27	6	0	Garrard 301	22	7	3
Dulci AM/FM	23	15	2	Garrard 301/Strob.	23	18	4
Jason J-2.10/MK3	37	10	0	Leak Stereo 20	30	9	0
Jason FM	22	15	8	Loudspeakers by—	...	...	...
Jason JTV	25	18	10	Expert, C.Q., W.B., Pye,	...	...	...
Quad II Control Unit	25	0	0	Wharfedale, Goodman's, etc.	...	...	...

**PRE-RECORDED TAPES** ● **TAPE TO DISC AND TAPE COPY SERVICE**

- ★ **COMPLETE TAPE RECORDER SPECIALISTS**
- ★ **LARGEST SELECTION OF LATEST MODELS**
- ★ **HI-FI DEPT. NOW OPEN**

*Brenell Mk. V	64 gns.	Philips 4 Tr. stereo	92 gns.
Brenell 3 star	58 gns.	*Reflectograph 'A' 1-tr	95 gns.
Brenell 3 Star Stereo	89 gns.	*Reflectograph 'B' 1-tr	105 gns.
Elizabethan Avon	27 gns.	*Saba	79 gns.
Elizabethan "Princess"	39 gns.	*Simon SP4	95 gns.
Elizabethan Profssnl.	65 gns.	Simon Minstrelle	39 gns.
*Elektron 95/4K Stereo	62 gns.	Spectone 161	49 gns.
*E.M.I. TR.51	100 gns.	*Telefunken KL85	79 gns.
*Ferrograph 4AN	81 gns.	*Telefunken 85K	75 gns.
*Ferrograph 4A/H	86 gns.	*Telefunken 75/15	54 gns.
*Ferrograph 4AN/S	88 gns.	Uher Universal	79 gns.
*Ferrograph 808	105 gns.	*Uher 4-tr Stereo	102 gns.
Ferrograph Stereo-Ad.	30 gns.	*Vortexion WVA	£93 13 0
Fidelity Argyl	29 gns.	*Vortexion WVB	£110 3 0
Grundig TK20	52 gns.	Walter 101	29 gns.
*Grundig TK25	62 gns.	Walter 303 De Luxe	42 gns.
*Grundig TK30	72 gns.	Walter 505	57 gns.
*Grundig TK35	82 gns.	Wyndor Victor	45 gns.
*Grundig TK55 Stereo	92 gns.	*Microphone extra	
*Grundig TK60 Stereo	128 gns.	<b>BATTERY PORTABLES</b>	
*Harting HM8 Stereo	86 gns.	Grundig "Cub"	26 gns.
H.M.V.	£50	Clarion	25 gns.
*Körting Stereo MK128	68 gns.	Minivox	37 gns.
Magnafor	49 gns.	Fi-Cord	59 gns.
Philips 4 Tr.	37 gns.	Stuzzi "Magnetite"	69 gns.
Philips 4 Tr.	59 gns.	Steelman 2 speed	55 gns.

Tapes of every size and type by leading makers ready for prompt dispatch. Also Pre-recorded Tapes.  
Please mention "Amateur Tape Recording" when writing.

**169-171 STREATHAM HIGH RD., LONDON, S.W.16**  
Between St. Leonard's Church and Streatham Station  
STReatham 0466/0192  
Hi-Fi Dept 181 Streatham High Rd., S.W.16



# TETE-A-TAPE

Further deliberations on frustrations imposed, and opportunities offered, by tape recording,  
by David Lazell.



## Wow at Westminster!

I went over to Westminster to make an educational tape recording recently. For this purpose, I stumbled from my warm bed early one Leicestershire morning, and caught the early train. I travelled down in a compartment occupied also by a young man who studied first a book in French, and then a tome, in English, on chess. His case, on the luggage rack, was emblazoned with the name of a well-known American air-line. I was about to enquire if he was interested in tape recording when he wandered into the corridor. So the conversation never began, and I am still wondering. It's a pity that we tape enthusiasts cannot have some method of mutual recognition, apart from carrying that 40 lb. "portable" everywhere we go. Perhaps a 5" spool, tied inconspicuously around the neck, or a pair of earphones permanently worn, might do the trick!

However, I duly arrived in the metropolis and prepared for the recording. There were three speakers to be caught on tape, and we had prepared a discussion for use with discussion groups. A bright young man stood at the controls of the Brenell, and, after a few minutes preparation—the taking in of great gulps of air, a number of forced coughs and, on my part, some furious clenching of fists under the table (nervous tension, you know)—we began. The speakers were really very good. They were able to ignore the presence of the recorder and ominous microphone, and we were doing quite well, until a terrible sound came through the window. In the street outside, a fiendish motorist had sounded a "warning device" (in the words of the Highway Code) and the screech itself sounded like the Last Trump from Gabriel's trumpet. The windows shook; I blanched. The chap at the recorder sighed, and the discussion continued.

Alas, that chord—which should have been lost—was the signal for a variety of horns, hoots and howls from the street outside. I suppose that most people working in London are accustomed to this background noise, against which they spend their lives. For a country lad like me, it was a mite dis-

turbing. We concluded the recording and played it back. Sure enough, the traffic of the street took part in the proceedings, but my speakers had other engagements, and had already given me much of their valuable time. I console myself with the fact that no listener to the recording can doubt that it was made in the Big City. But next time I will place a red flag and a great road sign at either end of the street—"Road Closed. Recording in Progress." It would be a wonderful thing if some enterprising electronic engineer could provide us with a gadget to immobilise all those flamboyant horns and hooters that modern cars possess. If we can get *that* far, maybe I can persuade pedestrians to tip-toe when we are recording next time. On the other hand, you can always arrange the recording session somewhere quieter—like the Yorkshire moors, or the top of Ben Nevis.

## On Baffling One's Landlady

A relation of mine sends me an occasional tape recording. If the conversation flags, she places the microphone near the budgerigar, which is something of an opportunist, and warbles forth in high fidelity whenever the "mike" appears. On the other hand, the large tabby cat, now adopted by the household, has a "purr" which would not disgrace a Diesel lorry. When either of these household pets get on to tape I have to hurry to turn the volume control down. Landladies do not usually approve of pets. As it is, mine looked at me rather quizzically. She is, however, a lady of considerable kindness; all landladies are not so. Thus, some advice for tenants who are unhappily placed. Play some recordings of horses, sheep, dogs and donkeys rather loudly, and ensure that you are seen going into the pet shop on the corner, or walk about with large parcels of carrots. Sooner or later the lady will enquire sharply



if you have a horse in your room. You will then be able to invite her in to see for herself. Her cry of astonishment at finding the room empty can be played back to her at regular intervals thereafter to ensure occupation without investigation.

## "Do It Yourself"—on Tape!

An enterprising American company has issued a special tape recording for owners of recorders. Accompanied by an illustrated manual, this tape "describes and lets you hear what your recording should sound like. It also illustrates by sound what over-recording, wow, flutter, distortion, wrong mike placement, etc., are like. In easy to understand language, backed up by sound demonstrations, you are instructed in the basic information you should have as a tape recorder owner." This must surely be an invaluable tape for characters like me who are lamentably ignorant about "what goes on underneath the lid." Actually, it is probably only a matter of time before we have such a tape available over here, possibly made available with new tape recorders. The whole field of "Do It Yourself" has a lot of possibilities for pre-recorded tapes, of course, simply because we can learn through the ear, on occasions, better than through the eye. A tape on "Learning to Drive," giving general advice to learner-drivers, would be useful assistance to those who want to lose their "L" plates. And what about a tape on "Buying a House—Do's and Don'ts"? I have been engaged in house purchase recently, and have found it rather confusing (and rather expensive, of course!) A tape for prospective house purchasers—of which there is an increasing number—would have been very useful. Then there's garden planning, new methods of home heating, cooking, and a whole list of other activities that call for learning. So there we are! Maybe someone will come up with some other suggestions. . . .

## Voice of an Immortal

I was able to borrow some of the Caedmon discs of Dylan Thomas a week or so ago, and it was an enlightening experience to hear the voice of the late Welsh poet. Dylan Thomas is equally well known for his poetry, his prose and his play, "Under Milk Wood," which has also been recorded. The voice of Dylan Thomas is deep, rich and poetic; if you ever want to use your own voice really effectively, listen to these, or other, recordings by Dylan Thomas. You will then realise, as I did, that voices like that come but rarely. He was, of course, Welsh, and a wonderful picture of his childhood—both very amusing and at times moving—is that of "A Childhood in Wales," released on one of the Caedmon discs. I can guarantee that if there's any poetry in your heart, you will want to hear this recording over and over again. He describes Christmas at home, and the festive occasions that it brought. I shall say no more, as I would not want to spoil the experience of hearing this recording by anticipation and narration. But, as I have said, it is also worth hearing the voice of this Welsh poet because it is a voice used, as a painter uses his brush, to paint a setting for his tale. We owe a considerable debt to the recording agencies for enabling us to hear one of this century's immortals. He died in America, still a young man, in 1953. It was a great loss.

## Winching Songs

I must confess that I do not know what "winching songs" are. Maybe "winching" is something to do

with "re-winding." However, I have an idea that "winching" is something to do with courtin'. In which case, I recommend all good men and true to listen to a new British disc called "Winching Songs—Joe Gordon Folk Four" (7 EG 8545). Such a disc would be an excellent gift for friends overseas, since it captures something which is essentially British. I should have said that these songs have their home north of the border, and that we Sassenachs are just lucky to be able to get them! Two of the four songs are full of humour; these are "Kissin' in the Dark" and "The Wee Toon Clerk." The other two, "Fair Annie" and "The Road and the Miles to Dundee," are in the ballad idiom. I will treasure this record as one of my favourites.



## A Visit to the Ivory Tower

There's a fine view of Fleet Street from the offices of "Amateur Tape Recording." On my visit to this ivory tower, I clambered up to the fourth floor, complete with bulging briefcase, large umbrella and some bright ideas! Not being a very athletic type, I was rather puffed by the time I arrived at the office. But I must say that the high altitude gives one a certain light-headedness. Which may explain a lot that gets into "A.T.R."! Seriously, the place was a hive of industry. I was at once offered a cup of tea, which is always a sign that an office is being organised on efficient, well-managed lines. Better service to readers and members—that is certainly the aim of the staff. It was worth all those stairs to meet 'em!

## AUDIO FAIR SELECTION

Any Equipment taken in **PART EXCHANGE**

*Installation and Repairs a Speciality*

Grundig Cub Portable	26 gns.	Ferrograph 808 Stereo	105 gns.
Grundig Mains Unit	7 gns.	Grundig TK35	82 gns.
Ferguson	28 gns.	Quad II Amp	£22.10.0.
Crown Audio	39 gns.	Quad II Control	£19.10.0.
Simon Minstrelle	39 gns.	Quad Stereo Control	£25. 0.0.
Sound Studio	42 gns.	Quad F.M. Tuner	£28.17.6.
Philips 4 Track	59 gns.	Garrard 301	£27. 7.3.
Brenell Mk. 5	64 gns.	Garrard 4HF	£18. 9.3.
Grundig TK20	52 gns.	Viking Enclosure	£10.10.0.
Brenell 3 Star	58 gns.	Super Hi-Fi Cabinet	£19.19.0.
Korting Stereo	68 gns.	EMI Chassis 10 watt	£25. 0.0.
Harting Stereo	86 gns.	Tannoy Canterbury	£43.15.0.

**FREE DELIVERY**

Write, Phone or Call

**H.P. Terms up to 3 years**

**FREE BROCHURE**

**RAPP TAPE RECORDERS LONDON**

**181 DALSTON LANE, E.8**

**AMH 5253/2238**

# FREE H.P!

WE HAVE THE LARGEST SALES  
OF TAPE RECORDERS IN THE COUNTRY!  
WHY! BECAUSE WE GIVE YOU THE BEST  
TERMS —

THEY INCLUDE:—

- ★ 2 YEARS TO PAY ★
- ★ NO INTEREST CHARGES ★
- ★ DEPOSITS FROM 10% ★



- ★ FREE SERVICING FOR 12 MONTHS — NO CHARGES
- ★ NO PURCHASE TAX
- ★ FREE DELIVERY ANYWHERE IN U.K.
- ★ PART EXCHANGES
- ★ CHEAP SECOND-HAND MACHINES
- ★ SPECIAL FREE TAPE & COMMISSION OFFERS
- ★ 10% INTEREST PAID ON YOUR DEPOSIT
- ★ and lots more besides

WE CAN SUPPLY ALL GOOD EQUIPMENT ADVERTISED IN THIS MAGAZINE ON BETTER TERMS THAN YOU CAN GET ANYWHERE ELSE.

400 machines in stock — £20,000 worth of over 80 different new and second-hand models on permanent demonstration in our showrooms ★ Main Agents for all the best makes ★ Open all day Saturdays ★ Our Mail Order Department covers the whole of England, Wales, Scotland and Northern Ireland — order from us wherever you live for speedy delivery, better service and better terms than you can get locally.

Write, Phone or Call at once for Free Brochures & full details of our Terms—it saves you money if you buy from us.

30 mins. from Central London

# HOWARD

## TAPE RECORDERS

218 HIGH ST. BROMLEY, KENT. RA1 477

— — — — — cut off here and post this coupon to us today — — — — —  
PLEASE RUSH ME FULL DETAILS OF YOUR TERMS AND BROCHURES:

ATR/APR

Name ..... Address .....

NAME BELOW ANY MODELS YOU ARE PARTICULARLY INTERESTED IN:

April, 1961

55



# 6 big features make the WINSTON 'Thoroughbred' a 'must' for you!

The most advanced technical features combined with tip-top performance makes the Winston "Thoroughbred" the finest value in tape recorders today! Look at these features.

- ★ Three speeds: 15, 7½, 3½ inches/sec—gives 3 hrs. 12 mins. playing time on one 7" tape.
- ★ Twin track recording.
- ★ Three loudspeakers ensure live, natural tone for speech or music.
- ★ 1,800 ft. spool of long-playing tape supplied—plus high sensitivity microphone.
- ★ Built-in mixer unit enables you to record your voice with standard disc recordings radio, or live music.
- ★ Built-in Public address system.

**SEE AND HEAR  
THE WINSTON  
'THOROUGHbred'  
AT YOUR LOCAL  
DEALERS!**

*All this and only*  
**59 gns** *no extras*

or £6 deposit and 12 monthly payments of £5 1s. 0d.  
WINSTON ELECTRONICS LTD., Govett Ave., Shepperton, Middx.  
Tel.: Walton-on-Thames 26321 Cables: "Winston", Shepperton.



**FREE**

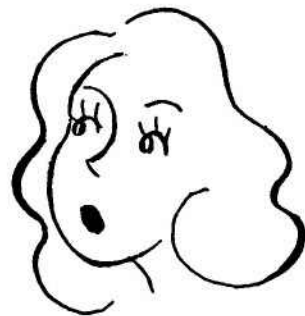
**BOOKLET.**  
Contains useful  
information on  
recording techniques  
and suggests various  
uses for tape recorder.  
Write for your copy  
to address on left.



# What is...?

## A Loudspeaker and Cross-Over Network.

By FREDERICKS



IN THE previous issues of this series reference was made to H.T.+. In this article we shall discuss what is H.T.+ and how we obtain it. First a few definitions.

H.T.+ (High Tension Voltage Positive) is the symbol used to indicate a D.C. (Direct Current) voltage or potential, either from a power supply or an H.T. battery. This voltage or potential is always D.C. and can be a few volts or thousands of volts. Other symbols that are used by various countries of the world are H.V. (High Voltage) and B. (again high voltage), but they mean the same as High Tension. Further to clarify the use of H.T., this is the voltage or potential that is used for the anodes (plates) of the valves in electronic circuits. The symbol H.T. is not used to indicate grid bias voltage or heater (filament) voltage.

Power supplies provide one or more of the following voltages used in electronic circuits:

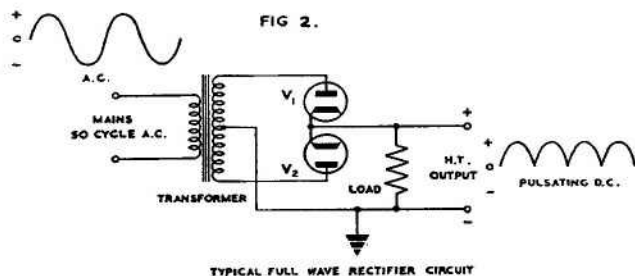
1. Anode voltage for valves—always D.C.
2. Bias voltages for valve control grids—D.C.
3. Heater voltage for valves—A.C. or D.C.
4. Voltages for other elements in multi-electrode valves—D.C.

You will note that most of the voltages obtained from the power supply are D.C. In high-quality audio amplifier circuits the heater voltage for the valves is quite often D.C., which reduces the hum level in the amplifier circuit. Normally, A.C. (Alternating Current) voltage is used for the valve heaters unless hum must be kept as low as possible, such as in very high gain amplifiers.

Now let us discuss how we convert the 50 cycle 230 volt A.C. mains supply to the voltages required by electronic circuits. We use rectifying valves or other devices to change the A.C. voltage to a pulsating D.C. voltage. A pulsating D.C. voltage varies from a zero value to a maximum positive value but does not reverse polarity. The basic rectifier is a "diode" (two-electrode device) and it provides what we call half-wave rectification (see Fig. 1). You will

notice in Fig. 1 that only half of the A.C. voltage cycle is used from the output of the rectifier, hence the reason why we call it half-wave rectification.

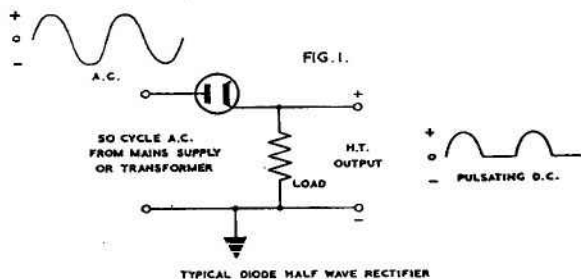
The diode valve will allow current to flow through the valve whenever the voltage on the anode is positive and will prevent current flow when the anode voltage is negative. Therefore, during the positive half of the input A.C. voltage cycle, current flows through the valve and a voltage is developed across the load resistance. Since no current flows during the negative half of the input A.C. voltage cycle no voltage is developed across the load resistance during negative half-cycles. If we used a second diode valve we can increase the efficiency of the rectifier circuit by rectifying both halves of the A.C. input voltage cycle. This is known as full-wave rectification. Fig. 2 shows a typical circuit.

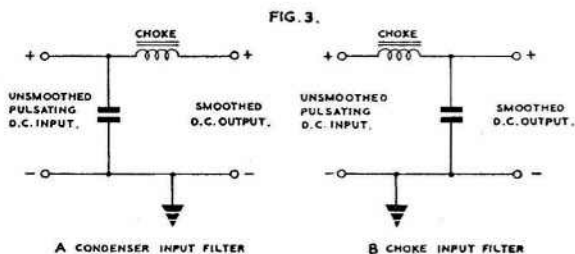


You will note that a transformer is required for full-wave rectification. The rectifiers V1 and V2 operate the same as if each was a half-wave rectifier; however, only one valve allows current to flow at any given time. During the positive half of the input voltage cycle the anode of V1 is positive and the anode of V2 is negative. Then as the A.C. input voltage reverses V2 anode is made positive and V1 anode becomes negative. Therefore, each valve diode works only half the time.

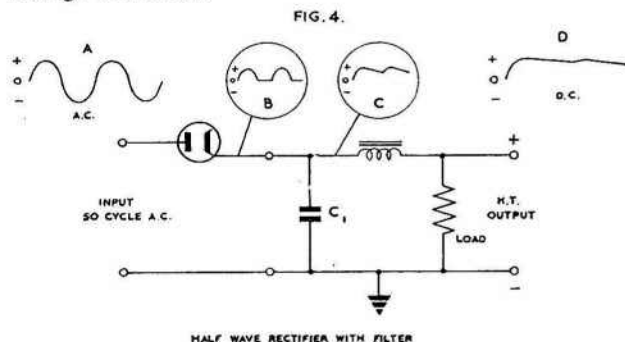
We must now change the pulsating D.C. voltage to a pure steady or constant D.C. voltage, such as that obtained from an H.T. dry battery, and this is accomplished by the use of a smoothing or filter network. There are two basic smoothing circuits commonly used. One is known as a condenser input filter and the other as a choke input filter. Fig. 3 shows these two types.

Both of these filters accomplish roughly the same function but each has certain advantages and disadvantages, and the requirements of the electronic circuit will determine which filter is used by a design engineer. The condenser input filter will provide a





higher output voltage than the choke input filter for the same input voltage, but the choke input filter will provide a smoother D.C. output. There is always a small amount of ripple voltage in the output of either of the filter sections, viz. the residue of the pulsating D.C. which engineers call ripple, and in order to reduce this ripple voltage to as low a value as possible, additional filter sections are used which are identical to the first filter section and each additional section will reduce the amount of ripple voltage. However, the smoothed D.C. output voltage is made lower due to losses in the filter sections. Normally only two sections are used to provide adequate ripple voltage reduction.



A quick review of how the rectifier circuit operates. When the input A.C. voltage is positive, current flows through the diode and charges the filter condenser  $C_1$ , but when the input A.C. voltage is negative no current flows through the diode as previously explained, but the condenser which was charged on the positive half-cycle now discharges through the choke and load resistor and fills a gap—viz. gives a more constant D.C. supply. Fig. 4 shows a typical half-wave rectifier with a condenser input filter. The input voltage at A is A.C., the output voltage at B from the diode rectifier is pulsating D.C., the voltage at C across the capacitor is also pulsating D.C. but does not drop to zero, and the output at D from the filter is smoothed D.C. with a small ripple content. In any filter circuit a resistor can be substituted for the choke with some loss of filter efficiency.

The values of the condenser and choke are selected according to the ripple frequency of the rectifier circuit. This can be determined as follows:

Using half-wave rectification, the ripple frequency is the same as the mains supply frequency—50 times a second for a mains supply of 50 cycles.

With full-wave rectification the ripple frequency is twice the mains supply frequency.

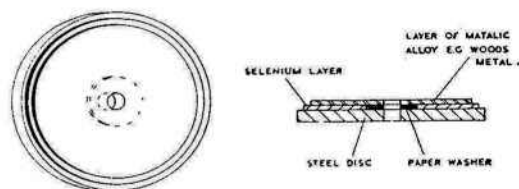
The higher the ripple frequency, the easier it is to filter out the ripple voltage and the smaller the size of the condenser and choke required. From which

it will be seen that one of the main advantages of full-wave rectification is the ease with which we can get rid of the undesirable ripple voltage.

Valve diodes can be replaced by many other types of rectifying devices that have many advantages over the use of valves. A few of these advantages are: cost, size, efficiency and heat reduction. A brief description of each type of device available, with typical uses and other comments, will now be given.

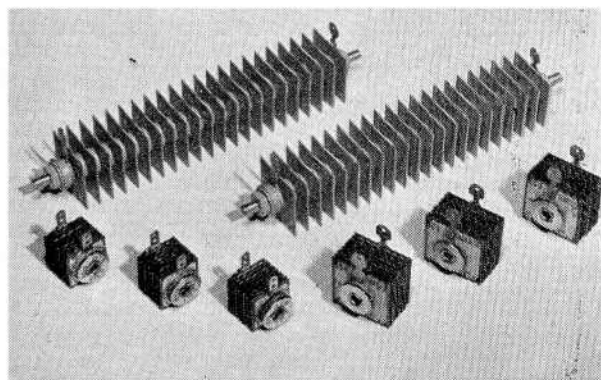
Selenium rectifiers consist of one or more specially treated metal discs or plates. The disc is coated on one side with a thin layer of selenium, then over the selenium a thin layer of metal alloy.

FIG. 5



SINGLE SELENIUM RECTIFIER DISC

Several of the discs are assembled on a bolt or rivet to increase voltage or current ratings or to provide half-wave or full-wave rectification in a single assembly. Many radio and television sets use selenium rectifiers instead of valves due to physical size and cost reduction and long life of the unit. Selenium rectifiers are approximately 80% efficient and under certain conditions approach 90% efficiency.



Typical examples of half wave Sentercel Selenium Rectifier  
(Photograph by courtesy of Standard Telephones and Cables Ltd., Rectifier Division, Harlow Essex).

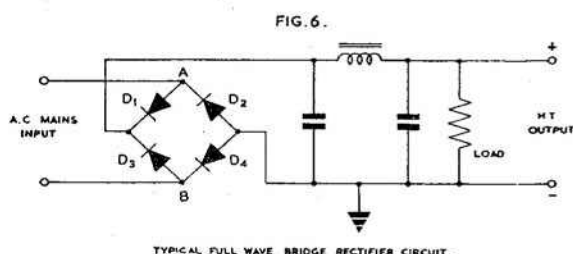
Silicon diodes have become available during the last few years and these have voltage and current handling capacities adequate to use them as power supply rectifiers. These diodes have efficiency ratings well over 90% and make excellent components for use in power supplies for audio amplifiers; in size they are very small, and produce little heat during use as compared to valve rectifiers. They are rather expensive but with improvements in production methods prices are being reduced, and within a few years costs will be below equivalent valve diodes. These units have extremely long life. Some of the



newer audio amplifiers, radios and television receivers are using silicon diodes at the present time.

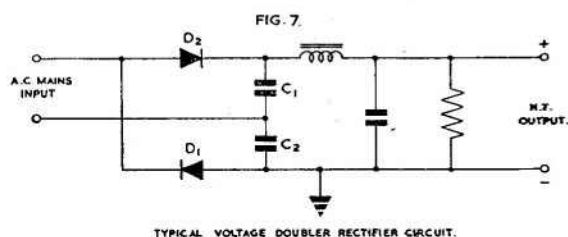
Another type of diode unit is the copper oxide rectifier. This device is similar in some ways to the selenium rectifier, but due to the large physical size required for adequate voltage or current ratings, these units are not normally used in power supplies. They are used more as instrument rectifiers where very small voltages and currents are used.

Half-wave diode rectifier units can be combined into circuits to provide high voltages (H.T.) in many ways. Each method has advantages and disadvantages. Let us now discuss a few of these circuits. Two half-wave diodes can be combined into a full-wave rectifier circuit. This was covered earlier in the article, but a transformer was required. To save the cost and weight of a transformer, four diodes can be combined into a full-wave bridge rectifier circuit, as illustrated in Fig. 6.



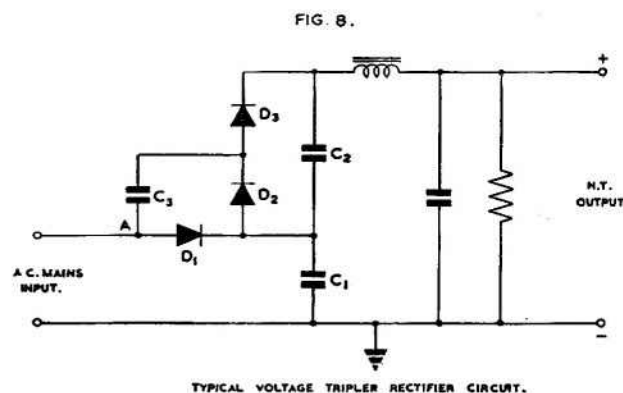
When point A is positive and point B is negative, diodes D1 and D4 allow current flow through the circuit, from point A through diode D1 to the filter choke, then across the load resistor to diode D4 to point B. When point B is positive and point A is negative, current flows through diode D3, the filter choke, load resistor and diode D2 to point A.

Whenever mains voltage is used direct without a transformer, as in Fig. 1 and Fig. 6, the output voltages from the power supplies are restricted to certain limits. A 230 volt mains supply will give an output voltage of approximately 110 volts for a half-wave rectifier without a reservoir condenser and 220 volts approximately for a full-wave bridge rectifier. The voltage doubler circuit is a method of obtaining the same output voltage as a full-wave bridge rectifier with only two diodes. Fig. 7 shows a typical voltage doubler power supply circuit. When point A is positive the diode D2 charges capacitor C1.



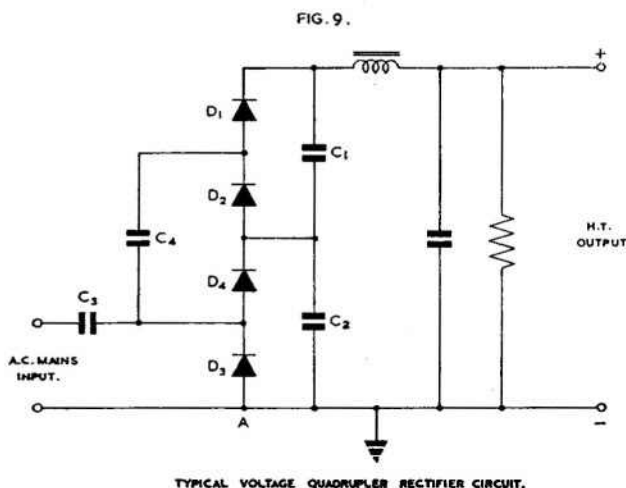
When point A is negative capacitor C2 charges through diode D1. This results in the peak voltages across capacitors C1 and C2 adding to double the value of the mains supply. The output voltage from the filter would be approximately equal to the mains voltage, or approximately 220 volts D.C. for a mains supply of 230 volts.

We can obtain three times the output of a single diode by the use of three diodes in a voltage tripler rectifier circuit. Fig. 8 shows a typical tripler circuit.



When point A is positive capacitor C1 charges through diode D1 to the peak value of the mains voltage. When point A is negative the mains voltage and the voltage across capacitor C1 add to charge capacitor C3 to double the mains peak voltage through diode D2. As capacitor C3 charges, capacitor C2 is also charged to the same voltage through diode D3. Therefore the output voltage of the rectifier is the sum of the voltages across capacitors C1 and C2, which is a total of three times the peak voltage of the mains supply. When the voltage is filtered we have an output of approximately 330 volts D.C. for a mains supply of 230 volts A.C.

A voltage quadrupler rectifier circuit will give approximately 440 volts D.C. from a 230 volt mains supply. Fig. 9 shows a typical circuit. When point A is positive capacitor C3 charges to the peak mains voltage through diode D3, which in turn charges

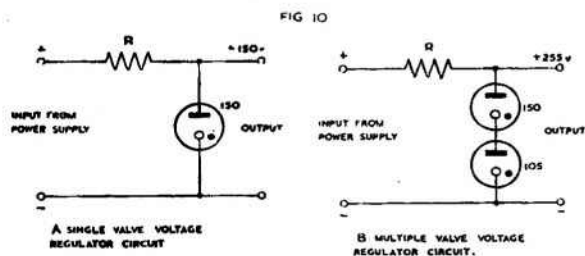


capacitor C2 to twice the mains peak voltage through diode D4. Capacitor C4 is also charged to twice the mains peak voltage through diodes D4 and D2 in series. This in turn charges capacitor C1 through diode D1 to twice the mains peak voltage. The sum of the voltages across capacitors C1 and C2 is equal to four times the mains peak voltage. This is then filtered and we have approximately 440 volts D.C. from a 230 volt mains supply.

These three multiplier circuits sound good but the catch is that when we obtain higher voltages by these methods we reduce the current that can be used. Whenever current requirements are low for high voltages these voltage multipliers can be used. A television receiver uses the voltage tripler to obtain the 20,000 to 30,000 volts which is required by the picture tube since the current requirement is very low.

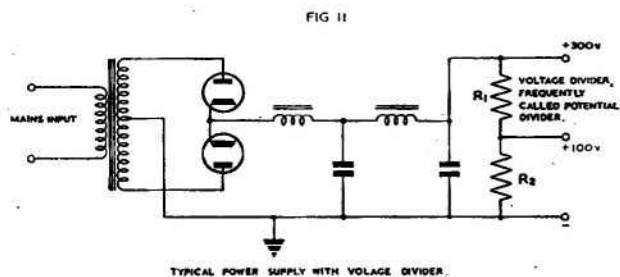
In all the circuits discussed we have high voltages that are unregulated, but as we vary the amount of current used by the electronic circuits we find that the output voltage varies from the power supply and as more current is used the voltage will steadily decrease. Some electronic circuits are voltage sensitive and the power supply must deliver a constant voltage regardless of current requirements. One method of achieving stability is to fit across the output of the power supply what is called a "bleeder resistor", which provides a minimum current drain on the H.T. supply. This improves the voltage regulation and partly stabilizes the output voltage.

When close tolerance voltages are required, voltage regulator valves can be used. These are gaseous discharge or glow valves and are available for 75, 105 or 150 volts. Two or more of these valves can be put in series for higher voltages. Fig. 10 illustrates



how these voltage regulator valves are connected to regulate the voltage of the power supply. The resistor R is a current limiter to prevent damage to the voltage regulator valves. There are more complicated methods of regulating the voltage when large currents are required. These circuits use triode or pentode valves. Since they are not normally used with audio amplifiers, they will not be discussed.

We may require several different voltages from a power supply. When this is required a voltage divider is used in place of the bleeder resistor. Fig. 11 shows a typical power supply with a voltage divider. The values of the resistors are selected by application of Ohm's Law, as the desired voltages and currents are always known and the resistance can be easily calculated. A previous article explained



Ohm's Law. The current required by the load connected to the 100 volt tap plus the current through resistor R2 determines the value of resistor R1. Bleeder current is normally 10% of the rated current capacity of the power supply. Compute the value for R2 using the 10% current value, then calculate the value for R1.

This article completes the internal components of a tape recorder. The next articles will cover programme input sources that we can utilize for recording. In the next article, however, we shall discuss turntables, record changers and discs (including stereophonic recordings).

Personal Service for the discriminating Amateur

*Leonard J. Francis*

THE SHEEN TAPE RECORDER CENTRE

Specialists in Tape Recorder and Sound Equipment

8 Station Parade, SHEEN LANE,  
SHEEN, London, S.W.14  
(Next to Mortlake Station S.R.)

## MANCHESTER'S SPECIALISTS IN SOUND REPRODUCTION



All Tape Recorders  
Stocked

PHILIPS  
FERROGRAPH  
BRENELL  
GRUNDIG  
WYNDSOR  
etc., etc., etc.

Each model **DEMONSTRATED** by skilled staff  
who are **ALL TAPE RECORDING ENTHUSIASTS**  
Prompt & efficient **SERVICE & MAINTENANCE**  
by trained **ENGINEERS**

**RADIO TUNERS — ACCESSORIES**  
**LOUDSPEAKERS AND**

**ALL LEADING MAKES OF HIGH FIDELITY**  
and **STEREOPHONIC EQUIPMENT** in stock

Our own **TAPE CLUB** is opening shortly with  
regular meetings at the Grosvenor Hotel —  
honorary Membership to all our **CUSTOMERS** —  
old and new

"His Masters Voice"

Recorded **TAPEs** — and Gramophone Records

\*The **HOME MUSIC** centre at  
**8 DEANS GATE (NEXT TO GROSVENOR HOTEL)**  
**MANCHESTER**

\* High Fidelity Developments Ltd.

*This months* **Special Offer !**  
*From the AUDIO REPRODUCTION CENTRE*

★ **SAVE £12** ★

# PHILIPS

EL 3527  
**TAPE RECORDER**



USUAL  
 PRICE  
**£40.19.0**

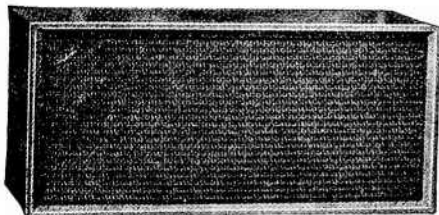
- New improved layout of tapedeck.
- Mixing facilities for radio/record and microphone inputs, with tone and playback volume controls at the front of the tapedeck.
- Quick stop and start of tape by a simple switch.
- Sensitive crystal microphone.
- Visual indication of recording level.
- Twin-track recording at 3½ in. per second.
- Provision for playback through radio or external amplifier.
- Monitoring of radio or microphone inputs during recording.
- Instrument may be used as a gramophone amplifier, and there is provision for recording from radio and gramophone as well as from microphone.
- High efficiency 4 in. speaker.
- Printed circuit.
- Supplied complete with 5 in. reel of tape.

**FOR ONE MONTH £29.19.6** or Deposit £3 and 12 monthly payments of 50/-

**AUDIO REPRODUCTION CENTRE** 134 Uxbridge Road, Shepherds Bush, W.12  
 Telephone : SHEpherds Bush 2234



# CLEAR TAPE REPRODUCTION WITH WHARFEDALE PST/8



Modern tape recorders are capable of astonishingly faithful reproduction when connected to a separate wide range loudspeaker such as the PST/8.

This unique enclosure is designed to give optimum results with Wharfedale 8" foam surround units which are available in a range of impedances to suit all machines.

*Descriptive literature sent free on request*

PRICE: £7 10 0 in whitewood. Cabinet only.

£10 10 0 finished in walnut  
oak or mahogany veneers.

*Recommended units:*

8 in. Bronze/FS/AL £4 6s. 7d. inc. P.T.  
Super 8/FS/AL £6 19s. 11d. inc. P.T.

**Wharfedale**  
WIRELESS WORKS LTD  
IDLE BRADFORD YORKS

Telephone: Idle 1235/6

Telegrams: 'Wharfdel' Idle, Bradford.

ARE YOU A CONNOISSEUR ?  
(With, of course, limited means)  
THE P.A.R.

## allegro

TAPE RECORDER

Offers you a full range of Tape Recorder facilities at a really economical price: 39 gns. Complete with 7" spool of Tape and Crystal Microphone.

Consider some of the highlights of this machine:  
\* Three speeds, \* High Quality 3 watt Amplifier,  
\* Automatic muting, \* Demagnification position,  
\* Separate Bass and Treble controls, \* Separate  
Mic. and Radio/Gram. input sockets. Write for  
FREE leaflet giving full details, or ask for a  
demonstration at a leading stockist.

### P.a.R. electronics

7 Avery Row,

Mayfair, London, W.1

Telephone: MAYfair 9910

## PSYCHO-TAPES AND DISCS

*New Methods of Home Psychology*

PERSONALISED tapes recorded individually for each patient by well-known Psycho-therapist for:—

**NERVOUS FEARS, STAMMERING,  
INFERIORITY, AND ALL PERSONAL  
PSYCHOLOGICAL PROBLEMS**

Also SPECIAL TAPES on:—

**DEVELOPING A POSITIVE PERSONALITY,  
SELF-HYPNOSIS, MIND MANAGEMENT,  
HOW TO OVERCOME INSOMNIA, ETC.**

Please post Coupon NOW for full details

Please send free BOOKLET

Name (Mr. Mrs. Miss).....  
(Block letters please)

Address .....

To EDUCATIONAL RECORDINGS PSYCHO-TAPE  
(Dept. A3) 27 YORK ROAD, ILFORD, Essex

# THE HEALING VOICE

By Walter Gillings

In 30 years experience as an osteopath and hypno-therapist, Percival Ager has inclined his sympathetic ear to the personal troubles, doubts and fears of thousands of suffering patients.

## Held back by fear

While occupied with his patients, Mr. Ager found himself thinking more and more about those people, more timid than most, who might benefit from treatment if they could only summon up the courage to visit him—or some other psychologist—and tell him their troubles.

It was his interest in tape recording which finally impelled Mr. Ager to come to the rescue of these reluctant patients, by the simple process of bringing the treatment they needed directly to them. After two years of preliminary experiment and preparation, he founded The Psycho-Tape Institute, which has brought the prospect of an early cure for their disorder to people who will never see the inside of a psychologist's consulting room.

## Revolutionary

The psychologist is, in fact, treating them in their own homes—giving them the benefit of his instruction and advice in his own voice, imprisoned on

magnetic tape, which the patient may listen to as often as needed at the touch of a switch.

For the patient who has access to a tape recorder, the method has another advantage: it is very much cheaper than visiting a consultant for a course of treatment which may, in some cases, take several months. Psycho-tapes may be played over and over again, as required, on any domestic recorder.

## Personal treatment

Mr. Ager has made available a completely personal treatment-by-tape-recorder, a service which is quite unique.

First, the patient is invited to fill in a consultation form and give a full account of his difficulties on a separate piece of paper—or on a three-inch tape, through which the psychologist may hear the patient talking about himself, though he may never see him.

After a proper assessment of his case, the patient receives back a Personalised Psycho-tape which is recorded specially for him on a completely individual basis, giving him practical advice on how to cope with his particular problem.

The Psycho-Tape Institute, which is a branch of Educational Recordings, also offers pre-recorded tapes to help home patients overcome sleeplessness, develop a more positive personality and also self-hypnotic tutorial tapes. These are invaluable to actors, students, doctors and business men—to anyone, in fact, who wants to sharpen up his mental capacities and make the process of learning less arduous.

## LONG PLAYING RECORDS FOR HIRE

10 in. L.P's 3/-

12 in. L.P's 4/-

ORDERS OVER 10/- POST FREE

Write for lists enclosing 6d. stamp

### AUDIO REPRODUCTION CENTRE

134 UXBRIDGE ROAD, SHEPHERDS BUSH W.12

Telephone: SHEpherds Bush 2234

OPEN ALL DAY SATURDAY

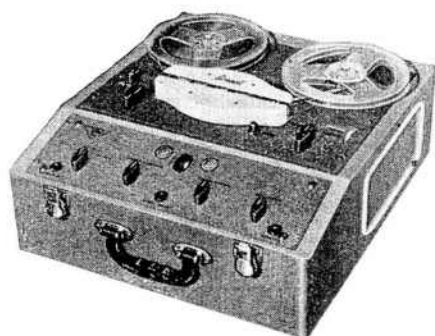
## TAPE BANK TRAIL

During the past month we have nearly doubled the mileage of the previous month and have reached Hayle. However many new Hospitals and Blind members are joining and tape is still urgently required. If everyone who reads this magazine donated 2/6d we would be able to travel from Lands End to John O' Groats three times in ONE MONTH. Could we possibly do that? Finally A.T.R. would like to thank the anonymous donor in Birmingham for a 7in. reel of double-play tape.

**DONATE 2s. 6d. (100 ft. of Tape)**  
TO THE  
**BRITISH RECORDING CLUB**  
**TAPE BANK**  
FOR THE USE OF THE  
**HOSPITAL BROADCASTING**  
**SERVICE AND THE TAPE**  
**READING CIRCLE for THE BLIND**  
145 FLEET STREET, LONDON, E.C.4

**LOOK  
FOR  
THIS  
POSTER**  
DEALERS THROUGHOUT  
THE UNITED KINGDOM  
DISPLAYING THIS POSTER  
WILL GIVE YOU PROMPT  
AND PERSONAL SERVICE

**OFFICIAL  
SUPPLIERS  
TO THE...**



**BRITISH  
RECORDING  
CLUB**

VISIT THE SHOWROOMS  
& GRAMOPHONE RECORD  
LIBRARY AT . . . . .

## AUDIO REPRODUCTION CENTRE

134 UXBRIDGE ROAD  
SHEPHERDS BUSH, W.12  
SHE 2234

**RECORDING MACHINES LIMITED**  
119 VICTORIA STREET  
LONDON, S.W.1

**DICKINSONS OF PALL MALL LTD.**  
11 ROYAL OPERA ARCADE, PALL MALL, S.W.1  
Behind Her Majesty's Theatre in the Haymarket TRA 2881  
(See our Advertisements on pages 48 & 70)

**NUSOUND** RECORDING CO., 3-8 Brigstock Parade  
London Road, Thornton Heath, Surrey  
TAPE RECORDER SPECIALISTS  
Opposite Thornton Heath L.T. Bus Depot—1st Floor Tel THO 7609

**ESSEX TAPE RECORDER & HI-FI CENTRE**  
2 MARYLAND STATION, STRATFORD  
LONDON, E.15  
MARYland 5879

**H. C. ENGERT Co. Ltd.**  
8-9 GRAND BUILDINGS  
TRAFALGAR SQUARE, W.C.2  
Telephone—TRAFALGAR 2581

**R.E.W. EARLSFIELD LTD.**  
545 GARRATT LANE  
LONDON, S.W.18 WIM 0709

**THE TAPE RECORDER CENTRE**  
(Proprietor: C. BRADDOCK)  
266 WATERLOO ROAD, BLACKPOOL, LANCs.

**R. B. TAPES CO. LTD.**  
179 Stoke Newington High Street, London, N.16  
Telephone: CLIssold 9477

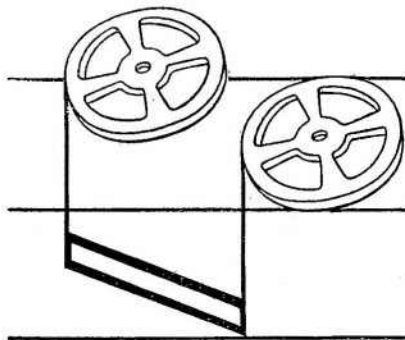
**FISHER ELECTRONICS CO. LTD.**  
60-66 WARDOUR STREET,  
Telephone: REGent 7597

**UNIQUE RADIO SERVICE**  
THE FACADE, HIGH ROAD, GOODMAYES, ESSEX  
Telephone: Seven Kings 8277

**SHEEN TAPE RECORDER CENTRE**  
8 Station Parade, Sheen Lane, Sheen, London, S.W.14  
Proprietor: L. J. Francis (Next to Mortlake Station S.R.)

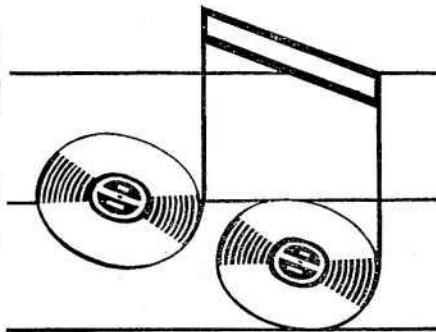
**RAPID RECORDING SERVICE**  
78s and LPs from your own tapes — Master discs and pressings  
Recording Studio equipped with Bechstein Grand  
Mobile Recording Van. "Off the Air" Service  
21, Bishops Close, Church Lane, E.17 COP 3889





# TAPE and DISC REVIEW

by STANLEY R. WHITE



"SAGA" RECORDS have launched a new label aimed at the teenage market; both tapes and discs will be issued under the "Triumph" label. It looks as though the 45 r.p.m. singles will be the discs for the younger people, with the "Triumph" tapes carrying the general "popular output" which has until recently appeared under the "Saga" label—I understand that in the future the latter will be devoted to the more serious output of the company.

At the time of writing I have not had the opportunity of listening to the first "Triumph" tape releases, but I have sampled several of the 45 singles aimed at the teenage market and, although the names featured are new to me, I can at least say that these new record stars are well up to the standards of already established performers in the popular record field.

"Triumph" RGM 1008. "Green Jeans"/"You Are My Sunshine" features a new "rock group" called "The Fabulous Flee-Rakkers". Out of the several "Triumph" discs I've heard, this is the one I have enjoyed most. The music is completely in the modern teenage idiom, with saxes and guitars doing the work. I like this one because the standard of playing is good with very unusual arrangements which do hold the listeners' attention, but it is the rhythm that will attract the record-buying public—rather a "rhythm and blues" style reminiscent of the one-time popular "Earl Bostic".

"Triumph" RGM 1002. "Let's Go See Grandma"/"Believe Me". This disc features vocalists "Joy and Dave" with orchestral backing by Charles Blackwell. "Let's Go See Grandma" is a number which should be popular.

Other "Triumph" discs feature girl vocalist "Yolanda" (RGM 1007), "With This Kiss"/"Don't Tell Me Not to Love You", and a lively outfit going under the title of "Peter Jay and the Blue Men" (RGM 1000), "Just Too Late"/"Friendship". It is highly possible that any of these artistes might soon top the hit parade with these or future recordings, and I bet they will be heard in juke boxes all over the country before long. I advise any teenage readers with an interest in the current "pop" music trends to hear these new artistes on the new "Triumph" label. Not all of the material is my cup of tea, but it will have wide appeal.

In a recent review I mentioned the smart black boxes used for "Music On Tape" products. Now the firm issues the tapes in attractive coloured boxes with gold lettering. All enquiries for the "Music

On Tape" recordings should be sent to D.G.C. Limited, of 41 High Street, Camberley, Surrey.

"SALUTE TO GLENN MILLER" played by The Brussels International Big Band. "Music On Tape" No. CAS 2127 (stereo 7½ i.p.s.), 80s.; CA 267 (monaural 7½ i.p.s.), 42s.; CA 233 (monaural 3½ i.p.s.), 32s.

Like the other recordings in this popular series, this one is great. The band certainly brings back memories of the famous Glenn Miller orchestra with tunes associated with Miller. Of course it's the same old story—the fans of Miller will say that it isn't like the original for one reason or another or many. But for my money this tape is excellent; the musical standard is high, the recording is very good technically, and may I say how well it sounds in stereo (both at 7½ and 3½ i.p.s.), and whilst the faster speed

THE FABULOUS FLEE-RAKKERS



is still the better for quality I can assure readers that I was astounded at the reproduction quality at the slower speed—and still with good stereo reproduction. (I hope I am not speaking out of turn when I mention that the firm have installed some very expensive new equipment for the manufacture of these tapes—due to the demand.) I feel that this is one of the best tapes in the "Salute" series, and I'm certain that were it possible for the late Glenn Miller to hear this tribute to his own band he would be both

pleased with the thought behind it and completely satisfied with the sound of the band. **Titles are:** "St. Louis Blues"; "At Last"; "Sleepy Town Train"; "Yesterday's Gardenias"; "In The Mood"; "American Patrol"; "I Know Why"; "Tuxedo Junction"; "Rhapsody In Blue"; "Adios". Many of the old Miller favourites played in that certain style. "Tuxedo Junction" in particular recaptures the old Miller spirit. So does "In The Mood". A completely satisfying release.

## TAPE TERMS by HUNT



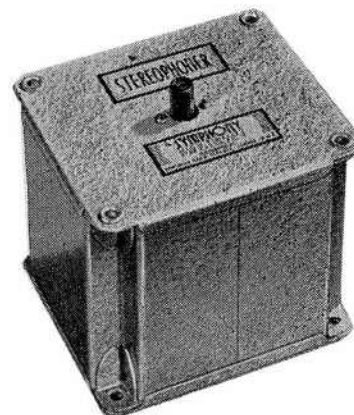
INFINITE BAFFLE

LOUD SPEAKER

PINCH WHEEL

## Is your problem CONVERSION TO STEREO?

If so you need the amazing Sterophoner. The invention of Dr. Hermann Scherchen, the famous orchestral conductor, the Sterophoner gives an exciting new realism and presence to reproduced music, from any monaural source, Tape Recorder, Hi-Fi Amplifier, radio or record player. Satisfaction guaranteed. No maintenance required.



IN STOCK NOW!  
THE INCOMPARABLE  
FERROGRAPH 808

Write now for NEW  
FREE coloured  
Brochure, reviews,  
reports, etc., giving  
full details of this  
astonishing invention.

The Sterophoner  
costs only £4:19:6  
plus 2/6 p. & p.  
Overseas £5:10:0 or  
\$16.00 post paid  
Sent C.O.D. (U.K.  
only) for 2/- extra.

## Professional Quality Recording brought within the reach of all!

### NEW! Symphony Mk III TAPE RECORDER

... ONLY 52 GNS.

or deferred terms

Just a few of this new Recorder's many features . . .  
• 3 Powerful B.T.H. Motors • New Tape Heads giving wide USEABLE frequency range without hiss  
• Electronic PLUS mechanical braking • Fast rewind time (less than 1 minute) • Full push-button control  
• Easy "drop-in" tape loading • Takes full-size 7" reels • Dual-speed—7½" and 3½" p.s. • "Stay-put" instant pause control • Hi-fi reproduction from large internal elliptical speaker in acoustically designed heavily constructed cabinet (no rattles!) • Available either in attractive portable cabinet or table cabinet, (in walnut, mahogany or light oak) at the same price.

**NORTHERN RADIO SERVICES (LONDON) LTD.**  
11 King's College Road, London, N.W.3. Telephone: PRImrose 3314

## MEET THE DEALERS



*Mr. Laurence Dickinson*

MR. DICKINSON came to the fascinating business of tape recording some seven years ago via photography, which has been his business and interest for most of his working life. Photographically he has done most things—salesman, studio worker, civil servant with the Admiralty, general manager for one

of the larger London companies, etc. Some three years ago he started his present business, and although he still sells photographic equipment he takes fewer and fewer photographs and spends much more time with his later love, tape recording.

He considers himself fortunate to earn a living dealing with something that he thoroughly enjoys, and believes that a business should be run on the friendliest possible lines, and he and his wife have made many friends through their business. He does not believe in the aloof approach, and expects to make contact very quickly with new customers.

He never hears his Christian name, being usually referred to as "Dick". He never visits a barber, for, to quote Mr. Dickinson, or rather "Dick", "I have a loving wife who cuts my hair from time to time." He likes classical music (symphonic and opera), poetry, food, wine, people (most), entertaining friends, travel, London and cowboy films.

He dislikes rock-and-roll, exercise, tomato soup, custard, counting pound notes, wearing formal dress, and cleaning his shoes.

Dick believes that tape recording has a tremendous future and will have wider and wider applications. He has already supplied machines to musicians, actors, engineering companies, universities, business houses, and even has two customers who purchased machines solely for recording tame birds.

So far as his future is concerned, Dick says that he is looking forward to better machines, cheaper tape and stereo broadcasts.

## The Sovereign Tape Recorder



Produced to meet the ever growing demand for a tape recorder giving full facilities at a very reasonable price

### STAR FEATURES OF THE SOVEREIGN

- ★ Unique "Consolette" screw-in legs enabling the recorder to be used as a floor-standing set or on a table.
- ★ Three-speed Two direction Twin-track facilities.
- ★ Instant track change.
- ★ 7in. Tape reels, giving over 3 hours recording using L.P. tape.
- ★ Magic eye recording level indicator.
- ★ Mixing facilities for microphone and pick-up.
- ★ Monitor speaker on-off switch.
- ★ Extension speaker sockets.
- ★ Input sockets for microphone, pick-up or radio.
- ★ Collaro Mark IV tape deck.
- ★ Choice of three two-tone finishes:— Red/Grey, Red/White and Black/White Polkadot.
- ★ Detachable lid to case.

**48 GUINEAS** (complete with microphone and one tape)

LEGS: 2 Guineas extra

**ABBEE RADIOGRAM MANUFACTURING CO.**

1a Compton Terrace, Hoppers Road, N.21

PAL 7492





This is the first report from Hans Koebner, our special correspondent in Germany, Austria and Switzerland.

Hans is the Editor of "Das Ton", Germany's Audio Magazine. He lives in Munich, and is a keen photographer and amateur tape enthusiast.

## Hannover Fair-Stop Press

by Hans Koebner

### HANNOVER—APRIL 1960

THE HANNOVER FAIR is an important occasion for all German amateur tape recordists, because manufacturers regard it as the annual shop window for their new products. It is an international fair, and this year ninety countries participated.

In the tape-recording field, Grundig presented us with the TK1 Transistorised Recorder, which is a further development of the Cub. The price is not yet fixed, but it is thought that it will be well under 300 D.M. (about £26). It is a fine machine, but the company will probably be producing further improvements, because to make it work it has to be held in one hand, the cover taken off, and the microphone held in the other hand. I think it would be difficult to use it for recording sound on location, because at the moment it cannot be slung from the shoulder.

A newcomer to the tape-recording field is Denmark, with a "Moviecorder", a semi-professional recorder of excellent design. At first glance it seems to be very similar to the Ampex.

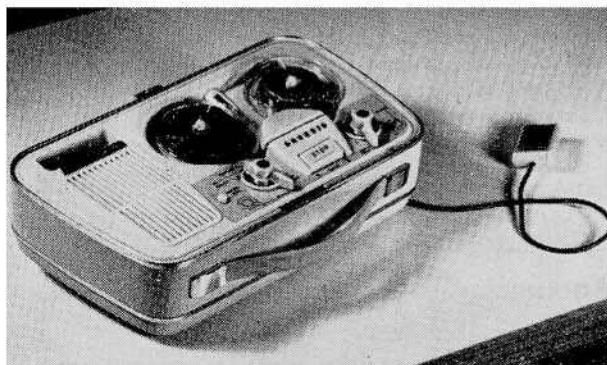
Stuzzi presented a "Radiocord", the first combined portable radio and tape recorder. This means that the amateur can tape at the same time as he hears the radio programme. It can be used as an

amplifier or with a telephone adaptor.

On the British stand I noticed B.S.R. Limited's "Monarch" recorder, and the Garrard Cassette tape deck, the only cassette on show, with the exception of the Philips device seen at Hannover.

Saba released two new recorders, the TK85 and 86. The TK85 and 86 are four-track stereo recorders for use either as stereo or monaural.

Telefunken introduced a new model, the 7-74K tape recorder, and the "Trickmixer" 77, to enable stereo fans to convert monaural sounds into a stereo effect. What we still need in Germany, however, are more portable, inexpensive tape recorders, suitable for batteries or mains operation.



The Grundig TK1 Lux portable recorder seen for the first time at the Hannover Fair, 1960.

to-TAPE-TO-DISC-TO-TAPE-TO-DISC-TO-TAPE-TO-DISC-to-  
 TAPE-TO-DISC-TO-TAPE-TO-DISC-TO-TAPE-TO-DISC-TO-  
 IF QUALITY AND DURABILITY MATTER  
 (especially with LP-s from your precious tapes)  
 consult Britain's most experienced transfer service.  
 (6 in. LP-s from 16/-). Delivery 3-4 days.  
 SAVE 25-30% ON BRANDED AMERICAN TAPES  
 1800 ft. from 35/-, 2400 ft. from 60/-. Post Free.  
 COMPREHENSIVE MAINTENANCE POLICY  
 (covering free servicing at your home anywhere in  
 Britain and guaranteed by the E.M.I. organisation)  
 supplied free with new equipment.  
 Specify requirements to.  
**SOUND NEWS PRODUCTIONS**  
 10 Clifford Street, London, W.1. REG 2745

### LANE'S SERVE THE SOUTH

We are the largest specialist Recorder and Hi-Fi Stockists serving SUSSEX and the SOUTH COAST.

- ALL LEADING MAKES IN STOCK
- FREE DELIVERY 25 MILES ROUND
- GOOD DEMS. AND SERVICE

Callers welcome or write for service by return

**LANE'S (RADIO) LTD**

11 GARDNER ST., BRIGHTON  
 (Between North St. & North Rd.)

Half-day Wednesday.

Phone: BRIGHTON 20773



**TWO YEAR GUARANTEE . . . NOT MASS PRODUCED**  
BUT VIRTUALLY HAND MADE FOR RELIABILITY & CONSISTENTLY HIGH  
STANDARD OF PERFORMANCE

★  $1\frac{7}{8}$  ips can be fitted for an extra 3 gns. ★ Superimposing fitted as standard ★ Provision for STEREO HEAD 2 or 4 Track  
★ Mixing facilities.

#### MODELS:

**R20 62 GNS.** with magic eye record indicator.

**R30 66 GNS.** with meter record level indicator.

**R40 70 GNS.** as R30 but with push/pull sound.

#### FURTHER FACTS:

It is not generally known that the Tape Deck mechanism is virtually re-built in the REPS machines. It is standard procedure to remove all rubber wheels—i.e., re-wind, idle and pinch—and re-grind them to a closer tolerance. Also the Capstan is skimmed to less than  $\pm 0.0001$ ". This has resulted in a very low "wow" factor, especially at  $3\frac{1}{2}$  ips which has led to the logical introduction of  $1\frac{7}{8}$  ips in place of the 15 ips. The principal cause of "flutter" is due to the eccentricity of the three-step pulleys which control the tape speed. This eccentricity occurs when the pulley is locked to the motor shaft and is due to the off-setting action of the fixing screws. This difficulty has been overcome by manufacturing pulleys over-size and machining to the correct diameter when fitted to the motor shaft. By this method a total variation of less than  $0.0001$ " has been achieved at  $1\frac{7}{8}$  ips. Initial measurement indicate total "flutter" content at  $1\frac{7}{8}$  ips to be of a lower order than previously associated with  $3\frac{1}{2}$  ips.

D. W. Aldous of 'GRAMOPHONE RECORD REVIEW' writes in March issue:

"The overall performance of this Repts R.30 recorder, coupled with its reliability and simplicity of operation, not to mention an attractive styling, must give it a wide appeal to tape recordists seeking an all-British machine of unusual quality."

#### TECHNICAL SPECIFICATION

The R.40.  $1\frac{7}{8}$  ips 70—4,500  $\pm$  3dbs.  $3\frac{1}{2}$  ips 60—9,000  $\pm$  3dbs.  $7\frac{1}{2}$  ips 50—15,000  $\pm$  3dbs. 15 ips 40—20,000  $\pm$  3dbs. (signal noise ratio at  $7\frac{1}{2}$  ips—47dbs.). Separate record amplifier. Push-pull bias erase oscillator for low tape hiss. Separate bass and treble controls  $\pm$  15dbs at 14 kc/s—15dbs at 40 c/s. Supplied complete with Acos 39/1 microphone,

Radio Record lead and 1,200' P.V.C Tape.

Please send me without obligation full details of your range of Tape Recorders. I am particularly interested in

Model R.....

Mr. ....

**REPS (TAPE RECORDERS) LTD.,**  
Dept. A.T.R. . . . 118 PARK ROAD NORTH  
SOUTH ACTON, W.3. . . Telephone: Acorn 4141

## NUSOUND RECORDING CO.

### TAPE RECORDER SPECIALISTS

- COMPLETE RANGE OF CABINETS by RECORD HOUSING

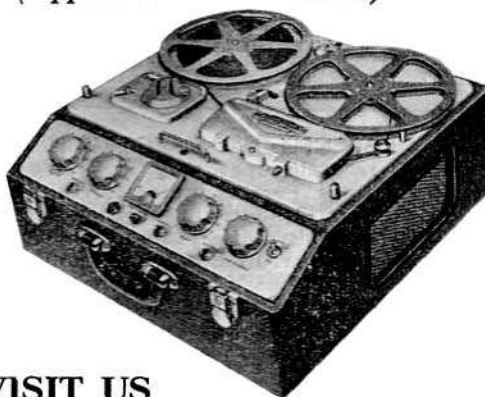
- Continuous Demonstration
- After Sales Service
- MAIL ORDERS By return
- Deferred Terms
- SEND FOR LISTS

**WE INVITE YOU TO VISIT US**

LONDON SHOWROOM  
35 CRAVEN STREET  
TRAFALGAR SQUARE, W.C.2  
Telephone: TRAFalgar 2080

THORNTON HEATH (Croydon)  
SHOWROOM FIRST FLOOR  
3/8, Brigstock Parade, London Road,  
Thornton Heath, Surrey.  
(Opposite THO. Heath Bus Depot)  
Telephone: THORnton Heath 7609

**Ferrograph**  
(Appointed Dealer)



In Stock,  
Recorders by:  
Reflectograph ★  
Vortexion ★  
Simon ★  
H.M.V. ★  
Ferrograph ★  
Grundig ★  
Korting ★  
Wearite etc. ★

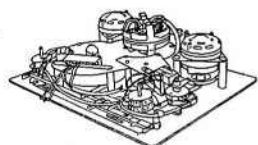
Amplifiers by:  
Quad ★  
Jason ★  
Leak ★  
Rogers etc. ★

Speakers by:  
Lowther ★  
Acousta-Twin ★  
Acousta ★  
Quad Electrostatic ★  
Wharfedale ★  
Goodman ★  
Vitavox ★  
Tannoy etc. ★

#### Accessories:

★ Tapes ★ Microphones —  
★ Stands, Tuners, Mixers etc.

**Brenell performance . . .** As soon as you see a Brenell you'll be impressed. You'll be impressed with its outstanding design . . . its contemporary styling . . . its neatness in construction . . . its compactness . . . with every control conveniently placed for simple operation. As soon as you hear a Brenell its startling realism in performance over a very wide frequency range will convince you of its exceptional capabilities. Seeing and hearing Brenell in action is of utmost importance to the keenest listener - it sets a standard which few manufacturers can equal at the price.



Brenell Mk. 5 Deck 28 Gns.



Brenell 3 Star 58 Gns.



BRENELL MK. 5 RECORDER 64 GNS.

Send now for complete details  
of the model you are interested in.

**BRENELL MK. 5 RECORDER.** Incorporating the famous Mk. 5 Deck. 4 recording speeds,  $1\frac{1}{2}$ ,  $3\frac{1}{2}$ ,  $7\frac{1}{2}$  and 15, giving exceptionally wide frequency range. Permits use of  $8\frac{1}{4}$  reels (3,600 ft. of D.P. tape at  $1\frac{1}{2}$  i.p.s., plays over 12 hours): 3 independent motors (B.T.H.): Foolproof interlocking controls: Instant stop without spillage: Pause control: High-quality amplifier: Recording level indicator: Monitoring facilities: Azimuth head adjustment: Provision for extra sound heads: Fast rewind (1,200 ft. in 45 secs.). Coloured signal lights. Price, incl. 1,200 ft. of tape, **64 Gns.**

The following units can be supplied as separate items: Tape Deck, with provision for extra heads, **28 Gns.** Complete record/playback amplifier, with power unit, **£24.** Stereo/rec. playback (including mounting rack), **£93.16.0.**

**Brenell** PERFORMANCE  
IS TRUE-TO-LIFE  
PERFORMANCE

The very latest! 3-Star stereo rec./playback, 89 gns.  
With two microphones, 95 gns.

Sole Manufacturers: BRENELL ENGINEERING CO. LTD., 1A DOUGHTY ST., LONDON, W.C.1. Telephone: CHA 5809 and HOL 7358



# HIGH QUALITY TAPE RECORDER SPECIALISTS

OFFICIALLY APPOINTED AGENTS FOR:

★ **FERROGRAPH**  
★ **SIMON**  
★ **REPS**  
★ **TANDBERG**

★ **REFLECTOGRAPH**  
★ **GRUNDIG**  
★ **BRENELL**  
★ **VORTEXION**

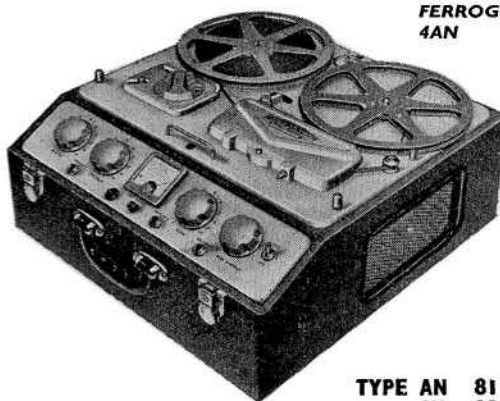
## ALSO IN STOCK

Tandberg Stereo	114
Stuzzi Mambo	39
Wyndor Victor	45
Verdik	45
Geloso	26
Philips EL3515	32
Truvox	52
Kurland Hi-Fi	56
Brenell 3 Star	58
Brenell Mark 5	64
Harting HM8 Stereo	86
Walter 101	29
Walter De-Luxe	42
Walter 505	57

Gns.

Perth-Saja Standard	45
Perth-Saja De-Luxe	56
Telefunken 75KL-15	52
Telefunken Stereo	64
Telefunken 85 K	75
Grundig Models from	52
Simon SP4	95
Saba Hi-Fi	79
Fi-cord Transistor	59
Clarion Transistor	25
Stuzzi Magnette Transistor	69
Grundig Cub Transistor	26
Ferrograph All Models from	81
Valradio D.C. Convertors	13

Gns.



FERROGRAPH  
4AN

TYPE AN 81 gns.  
SN 88 gns.  
STEREO 808 105 gns.

## On NO INTEREST TERMS

150 MODELS ON DISPLAY — FREE MAINTENANCE — 2/- IN THE £ DEPOSIT  
FREE INSURANCE ON YOUR INSTALMENTS

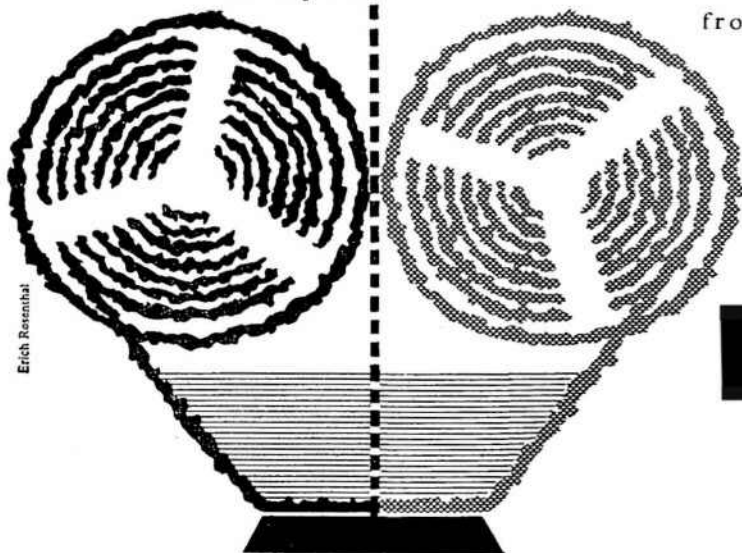
## Best PART EXCHANGE

ALLOWANCE ON YOUR OLD TAPE RECORDER — HI-FI EQUIPMENT

**REW** EARLSFIELD LTD. 545 GARRATT LANE, S.W.18 Tel.: WIM 0709

10 minutes from Tooting Broadway underground station. 100 yards from Earlsfield Station

what goes on  
in tape?



R. B. TAPES know! The best recorders of today are always in stock and our organisation is in the forefront of the latest developments in this exciting field.

All our machines may be bought on very convenient terms under our own 12-months guarantee and our famous free after-sales service.

We specialise in conversions. Write or call for free booklet with details of over 100 models.

✓ AGENTS FOR ✓

WYNDOR GRUNDIG  
TELEFUNKEN ELIZABETHAN  
ABBEE SIMON  
SPECTONE VERITONE  
SABA SOUND

Post NOW for FREE Literature!

NAME .....

ADDRESS.....

..... ATR

**R.B.TAPES**  
THE SIGHT AND SOUND CENTRE

179 STOKE NEWINGTON HIGH ST  
LONDON N16 CLISSOLD 9477

ALSO AT 89-91 GREAT ANCOAT STREET, MANCHESTER, 4



## the **FINEST** TAPE RECORDERS on **INTEREST FREE** TERMS....

Write, Phone or Call today.

**You can buy by post with perfect confidence**

**DEPOSITS FROM 20% 12 MONTHS TO PAY**

I know how difficult it is to choose the Tape Recorder. That is why more and more people come to the Royal Opera Arcade, because my advice, personal attention and help are freely given. Full demonstrations at any time, and you can always examine and hear the latest and most interesting machines. Remember—I am here to help you.

*Leaflets gladly sent if you are unable to call.*

LAURENCE DICKINSON



**NEW!**

**4 Track Monaural Recorders**  
**PHILIPS 59 gns. TELEFUNKEN 64 gns.**  
**4 Track STEREO/MONAUURAL RECORDERS**  
**PHILIPS 92 gns. HARTING 86 gns.**  
**KORTING 68 gns. ELEKTRON 77 gns**

**CAMERAS.** By Zeiss, Agfa, Eumig, Voigtlander, etc. Send for lists.

**READ THE ALL IN ONE** Tape Recorder Book, 12/6d. Packed with information.

**TELEFUNKEN DA CAPO RADIO,** 39 gns. Call and Hear this fine instrument.

**TELEFUNKEN TAPE DECK,** 63 gns. Use it with your amplifier or with the Telefunken Radio.

**ACCESSORIES.** We carry a wide range of microphones, earphones, leads, telephone adaptors, etc., etc.

**SERVICING.** We undertake Rapid and Efficient Servicing of all Tape Recorders.

**TAPES.** Audio, Agfa, B.A.S.F., E.M.I., GELOSO, Scotch Boy, Telefunken, etc. Send for lists.

Model	Gns
Philips 3515 ...	32
Sagatone ...	38
Elizabethan Princess ...	39
Simon Minstrelle ...	39
Perth Saja ...	45
Wyndor Victor ...	45
Elektron ...	47½
Magnafon ...	49
Spectone Ex Tape ...	49
H.M.V. ...	£50
Grundig TK20 ...	52
Telefunken 75 with mic ...	56
Perth Saja De Luxe ...	56
Brenell 3 Star ...	58
Veritone ...	58
Mobile ...	58
Ficord ...	59
Grundig TK25* ...	62
Telefunken Deck* ...	63
Korting Stereo* ...	68
Telefunken 4 track with Mic ...	68
Stuzzi Mag-Nette ...	69
Brenell MKV with Mic ...	69
Grundig TK30* ...	72
Brenell M.V. with meter, Mic ...	74
Elektron Stereo* ...	77
Telefunken 85KL* ...	79
Sabatun Automatic* ...	79
Harting Stereo* ...	86
Timbra* ...	89
Simon SP4* ...	95

\* Excluding Microphone.

## Dickinsons of Pall Mall Ltd

11 Royal Opera Arcade, Pall Mall, S.W.1. TRA 2881

The Royal Opera Arcade lies behind Her Majesty's Theatre in the Haymarket (one minute from Piccadilly Circus or Trafalgar Square).

## NEW EQUIPMENT

### WHICH YOU MUST SEE



#### THE "VICTOR" GRAMOPHONE

The only Portable Gramophone specially designed for use as an accessory to a Tape Recorder, supplied complete with mains lead and tape recorder connecting lead.

Salient features:—

Four-Speed motor, B.S.R. Gramophone Deck. Strongly constructed portable case, finished in Rexine. Special plug connection for direct linking with Tape Recorders. Provision made for the addition of a mixer to be made available shortly.

**Cash Price: 12 Gns., or £1.1.0 Deposit and 12 monthly payments of 21/—.**

#### THE TAPE MIXING ADE



Record and hear your own voice with top line bands, or orchestras. Operates with any make of Tape Recorder, Radio, Television, Radiogram or Microphone. Intermix your tape recordings with: Radio, Television, Radiogram or a combination of any. Anyone can fit the Tape Mixing ADE in a few minutes.

**Price complete 5 Gns. (no extras whatsoever)**

*Full information and illustrated leaflet from*

**AUDIO REPRODUCTION CENTRE**  
 134 UXBRIDGE RD., SHEPHERDS BUSH, W.12

Telephone: SHEPHERDS Bush 2234

# A Home-View

## of the MAGNAFON TR60 RECORDER

By F. C. JUDD, A.Inst.E.

THE MAGNAFON TR.60 is a new-style domestic instrument that will find a place in many homes as a family recorder, for it has a "new look" and a good electrical performance. The grey speckled finish, the curvature of the lid and the sloping front give the Magnafon an appearance just that bit different from other recorders; and if you have no handy table to stand it on, four substantial legs can be provided by the makers.

The construction of this recorder generally is robust and my only criticism is of the inward sloping control panel, which makes it a little difficult to see the recording level indicator and controls without leaning over.

A three-speed Motek deck is fitted, but note that tape direction is reverse from the generally accepted standard of left-to-right travel. This deck is capable of very good performance when it is backed up by a well-designed amplifier, and whilst there are some deficiencies in the Magnafon amplifier its performance can be classed as acceptable for a domestic recorder and it does do reasonable justice to the deck. Operation is simple by push-button controls for tape transport. A "neutral" position on the speed change control prevents flats occurring on the tape drive idlers when the recorder is not in use.

The Magnafon has all the usual features, namely: microphone and radio sockets, external amplifier and loudspeaker sockets, superimposing switch, tape position indicator, as well as separate bass and treble tone controls. It is supplied with a 1,200ft. reel of B.A.S.F. tape, an Acos microphone and an extra connecting lead.

The amplifier section is separate from the power supply and uses a circuit that seems to be popular nowadays with most manufacturers of this class of recorder. The valves employed are ECC83, tape-head, an intermediate amplifier; ECL82, output valve; ECC82, bias oscillator (push-pull); and an EZ80 rectifier. The rated full output of the ECL82 is 3.4 watts at 10% harmonic distortion, but unless the recorder is operated at maximum gain, quality of reproduction is very favourable.

### Performance Tests

Listening tests were carried out, using pre-recorded tapes which show the reproductive capabilities of a recorder better than tapes recorded on it. There was a lack of bass, partly due to the small loudspeaker of the type usually fitted to domestic machines and partly to a fall-off in amplifier response at the lower frequencies. The higher frequencies were well reproduced as the amplifier maintains its treble response up to 10 kc/s. The overall record/playback response, however, showed that greater pre-emphasis is required for both recording and playback. The hum level was rather high with the bass boost control in operation, for a test showed it to be only -20 dB at full gain. Noise produced by valves was at about -35 dB. Provided the recording level is well maintained and

excessive gain is not used, the general level of hum and noise is not noticeable even during quiet music or speech.

At  $7\frac{1}{2}$  i.p.s. wow and flutter are low enough to be tolerable. Other mechanical functions were satisfactory; tape wind and re-wind speed is fast and the tape spools-up fairly evenly. Braking is not fast but is certain and smooth, and showed no inclination to spill the tape. One minor point here: I thought that the re-wind spool could do with more back tension during playback or record, as there is a tendency for the unwinding spool slightly to overtake the speed of the tape through the capstan.

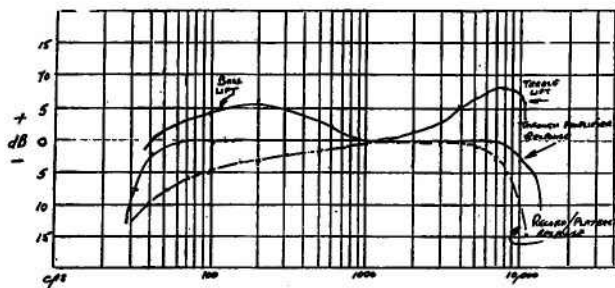


Fig. 1 Frequency response at  $7\frac{1}{2}$  i.p.s. at a reference frequency of 1,000 c.p.s.

The Magnafon can of course be used as a "through" amplifier for an external gramophone pick-up or radio tuner and will record these signal sources at the same time if desired. A dual mixing facility permits the radio or gram input to be mixed with the "mic" input; thus one can put announcements to music items without superimposing on, or interrupting, the music. A pause control is fitted.

Reproduction from the 7in. internal elliptical speaker is comparable with that from a good-class radio or TV receiver but could undoubtedly be improved by using an external speaker with a better bass response. The amplifier can be boosted a little by using the tone controls, which with careful adjustment will provide more depth to reproduction generally.

At the other two speeds, namely  $3\frac{1}{2}$  i.p.s. and  $1\frac{1}{2}$  i.p.s., there is considerable fall-off in overall frequency response although with the comparatively low "wow" percentage of the Motek deck quite a large number of acceptable "pop" recordings can be crowded on to a tape running at the lower speed.

The frequency response curves shown in Fig. 1 are included with the review for the sake of technical completeness, although far too much importance is attached to this part of a tape recorder's performance. Lack of response at either end of the audio spectrum does not imply that a recorder is a poor one. Far from it. Distortion, bad wow and excessive hum have more effect in spoiling performance than the lack of a few cycles at either end of the audible frequency range.

Although the Magnafon does not have a "Hi Fi" frequency response, it is capable of a markedly good general performance.

The Magnafon is priced at 49 guineas, is manufactured by the Magnafon Recorder Company, 3 Bagally Street, London, E.3, and is distributed by Market Developments, 221 Bishopsgate, London, E.C.2.



## CLASSIFIED ADVERTISEMENTS

6d. per word. Minimum 7/6. Box Nos. 1/6 extra.

**PROFESSIONAL RECORDING TAPE** (Joined) 1,200 ft. 7" spools at 20/- inc. box p.p. 1/6 per reel extra OLYMPIC SOUND STUDIOS, Carton Hall, Carton Street, W.1. Telephone: Hunter 1635.

**WYNDSOR VISCOUNT.** Condition as new, hardly used £40. Ring Hirstle, Fleet Street 3244 weekdays between 10 and 5.

**TAPESPENDENTS LABELS** 4½ x 3 inches 200 12/- send details stating colour to **SHIRLEY ANN'S PRINTING/DUPLICATING**, Castle Street, Eye, Suffolk, Samples on request. Tel. 219.

**TAPES? TRANSFER? EQUIPMENT WITH UN-CONDITIONAL SERVICE GUARANTEE?** Consult Sound News before you buy. See page 66

**GRUNDIG TK20** or similar wanted for cash. F. Riddle, 113 Church Road, Northolt, Middx. Viking 4734.

**COMEDIANS! I'VE GOT THE GAGS!** Ideal for tape or party time. Scripted gaglets 5/-. Bert E. Kerr, 26 Hubert Road, Birmingham 29

Tape Recorders, Players, Radios, etc. (Modern) wanted for Cash. Callers or particulars.—**Cooks Store**, 159 & 187, Praed Street, W.2 (opposite Paddington Station). Tel.: PAD 6464.

**AMERICAN HI-LO RECORDING TAPE**, 1,800ft Long Play 35/- (List 50/-) 7in. spool. Guaranteed. S.W.R. RECORDS LTD., 32 SHAFTESBURY AVENUE, W.1. REGENT 3030.

**2d. PER WEEK! SURELY YOUR TAPE RECORDER IS WORTH MORE THAN THAT?** If you were to suffer loss or accidental damage, then Insurance cover for your Recorder and equipment can be secured for as little as 10/- per year. **DON'T HESITATE.** Write now, giving details of your Recorder to: **DAYTON & CO.** (Insurance Brokers), 35 Craven Walk, London, N.16.

**TAPE TO DISC—ALL SPEEDS** s.a.e. for details **OMEGA RECORDING COMPANY**, 112 Sunnysbank Road, Potters Bar, Middx. Telephone 6428. (Evenings only).

**Friend's Folk Association**, Torquay (Est. 1943), Members everywhere, Hobby Exchanges, Stamps, Photography, Viewcards, Tapesponding, Pen-Friends, (100 countries).

**TAPE RECORDER** Need repairing? Let Britains leading Tape Recorder Repair Specialists do this for you at an economical price. **Essex Tape Recorder Centres**, 2 Maryland Station, Stratford, London, E.15 Telephone: MARYland 5879.

**TAPE RECORDERS.** Large selection of used models, most as new with three months guarantee. Part exchanges with cameras, binoculars, radios, etc. Good quality recording tape at competitive prices. **Cooks Store**, 159 & 187 Praed Street, W.2 (both opposite Paddington Station). Pad 6464.

### LIVERPOOL'S TAPE SPECIALISTS COCHLAN & ROBINSON LTD.

Offer unique sales and service facilities throughout the Northwest. Stockists of FERROGRAPH, REFLECTOGRAPH, GRUNDIG etc., etc. Free H.P. up to 12 MONTHS. EXCHANGES.

**COCHLAN & ROBINSON LTD.**  
18 HACKINS HEY, off DALE STREET,  
LIVERPOOL, 2. CEN. 5245

**3000 ONLY 10 inch SPEED 78**

**NEW RECORDS**

**AT THE EXCEPTIONALLY LOW PRICE OF**

**2/6 each**

**USUAL PRICE 6/9 7/- & 7/3**

**Cannot be repeated at this price**

**Personal Shoppers Only**

**AUDIO REPRODUCTION CENTRE**

**134 UXBRIDGE ROAD, SHEPHERDS BUSH, W.12**

**TAPE TO DISC RECORDING.**—Microgroove L.P. from 27s. 6d. 78 r.p.m. from 11s. 48-hour service. S.a.e. for comprehensive leaflet to: A. D. Marsh, "Deroy" Sound Service, Little Place, Moss Delph Lane, Aughton, Ormskirk, Lancs.

**TELEFUNKEN KL 75/15** unused £42.10.0d complete. Walters 161 Parkside, Wollaton, Nottingham.

**New and Unused Recording Tape** 7in. reels 1,200ft. 27/6 each (usual price 35/-); Ordinary tape 7in. reels 16/6, 5½in. 13/3, 5in. 12/-; Super quality 7in. reels 19/3, 5½in. 15/3; 5in. 13/9. P. and P. 1/- per reel. Empty plastic reels 7in. 2/10, 5½in. 2/8 P. and P. paid. Guaranteed on a money refunded not satisfied basis. A. Marshall and Son Ltd., 18 Cricklewood Broadway, London, N.W.2. GLA 0161-2.

**OSLO ELECTRONICS LTD.** the tape recorder specialists offer you the latest 1960 Tape Recorder Complete in every detail for only 19 gns. Wonderful Value minimum stocks available **HURRY** if you want one Now. Also the new Mannequin—now available from stocks—as fully reviewed in the February issue of this magazine. For service with a smile, Write, phone or call: **Oslo Electronics Ltd.**, 10 Lyons Place, London, N.W.8 Telephone: PADdington 8555.

**GRUNDIG TK830—3D. TWIN TRACK 2 SPEED, 3 SPEAKERS.** Complete with Tape and Mic. Cost £112—Mint condition—£72. F. Riddle, 113 Church Road, Northolt, Middlesex. VIKING 4734.

New guaranteed, superior High Fidelity Stereophonic/Monaural installation. 2 amplifiers, stereo pre-amplifier, F.M. tuner - all by Rogers (2 years guarantee). Collaro 4 speed transcription turntable and stereo P.U. All fitted into walnut table cabinet. Facilities for Tape record and replay. Two matching Wharfedale speakers - all for £75. - **Wood, The Studio**, 117, Ringwood Road, Highcliffe, Hants.

**EASYSPLICE TAPE SPLICER SPECIAL OFFER** 3/9d plus 6d P & P guaranteed for easy accurate tape splicing. Easysplice Co., 30 Lawrence Road, Ealing.

**LEAK POINT ONE STEREO PRE-AMP** and Stereo 20 amplifier, £43 Collaro 2010 in cabinet, £14 o.n.o. Ring TUDor 4405 or write Huddy, 63 Wood Vale, N.10.

**GRUNDIG TK8; TAPES.** 18 months, Cost 85 gns., Accept 45 gns. Buyer collects. Write Goodall, 137, BARNBYGATE, NEWARK.

**TAPE TO DISC SERVICE.** Send your recorded tapes to us and be sure of good service. 10% reduction allowed off initial Order. Figures in brackets denotes playing time in minutes. 78 rpm—Single sided discs, (2) 12/-; (3) 13/-; (4½) 15/6; or Double Sided 78s—(4) 14/6; (6) 15/6; (9) 18/-. 45 EP—(10) 19/-. LPs Single Sided discs—(9) 21/6; (15) 26/6; (20) 31/6; or Double sided LPs—(18) 26/-; (30) 33/-; (40) 37/6. 2/6 extra per parcel for Packing & Postage. SAE for leaflet:- **Sunderland Sound Services**, 28 Viewforth Terrace, Sunderland 57032.



*The Sensational*  
**SOUND "BELLE"**  
*brings tape recording within the reach  
 of everyone!*

At only 26 gns. the "Belle" is the lowest cost quality tape recorder in the world yet gives top class musical reproduction, utmost reliability and long life.

The "Belle" has simple push button operation, approximately 1½ hours playing time available, twin track recording, very fast rewind, magic eye recording level indicator, and 3 watts output.

Smart and compact, the Sound "Belle" is complete with long play tape, take-up spool, crystal microphone, extension lead for recording from radio or gramophone, detachable mains lead, built-in full-size elliptical speaker and facilities for use as a public address amplifier, record player and radio set.

Weight under 12 lb. AC mains 200-250 volts 50-60 CPS.  
 110 volt model available.

Size 10" x 7" x 4½". 2 years guarantee (on mechanical deck).  
 Price 26 gns. Smart carrying case 2 gns. extra.



**TAPE RECORDERS (ELECTRONICS) LTD.,**  
 784-788 HIGH ROAD, TOTTENHAM, LONDON, N.17  
 Telephone: TOTtenham 0811-3

The "Sound" Range also includes :-  
**SOUND PRINCE**

A completely new model with twin track recording, 4½ watts output, 3 hours playing time, facilities for mixing, superimposing and monitoring. Can be used as a straight amplifier. Price 34 gns.

**SOUND STUDIO**

The very latest 3-speed tape recorder for the connoisseur - has all the features of the "Prince" plus hi-fi output, 9 hours playing time, adjustable tone control, automatic locking device to prevent accidental erasing. All this for only 42 gns. complete.

**SOUND 555**

The supreme recording instrument with a luxury specification - but a moderate price. Matched 3 loudspeaker system, 4 watts output. Complete with Dynamic Microphone and Stethoset for only 65 gns.



In recording circles throughout the world, enthusiasts vie with each other to get the most natural sound from tape. Authenticity is however most important when tape recording is the tool of scientific research. Anthropologists

## Authentic Sound

goes round the world



in Africa thus require a recording tape that not only captures the fleeting sound of tribal song for leisure study, but also retains it despite the destructive effect of sun and sand.

BASF Magnetic Recording Tape is made to do just this. It has a base of Luvitherm, the tough, flexible plastic which permanently holds magnetic oxide in the tightest bond; and the oxide itself is made by a special BASF process to ensure magnetic stability no matter how long the tape is stored.

This outstanding tape can be used in all climates for every type of recording.

BASF is the original recording tape.

A vast reserve of more than 25 years experience and continued development keeps it ahead for authenticity.

On BASF tape you can always be sure of registering your recorder's complete range of frequencies...always reproducing them...always obtaining Authentic Sound whatever and wherever you record.

Insist on  
the tape with  
the Luvitherm base



**Magnetic Recording Tape**

**Standard • Long Play**

**Double Play • Editing Sound**

F. A. HUGHES & CO LTD 4 STANHOPE GATE LONDON W1